NEGOTIATION AGREEMENT

INSTITUTION: CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA 91125

The Facilities and Administration cost rates, Staff Benefit and Tuition Remission rates contained herein are for use on grants, contracts and/or other agreements issued or awarded to the California Institute of Technology by all Federal Agencies of the United States of America, in accordance with the cost principles and provisions mandated by the OMB Circular A-21. These rates shall be used for forward pricing and billing purposes at the California Institute of Technology for Fiscal Year 2002. This rate agreement supersedes all previous rate agreements or determinations for fiscal year 2002.

SECTION I: RATES-TYPE: FIXED AND CARRY-FORWARD PROVISIONS (FIXED) PREDETERMINED (PRED)

FACILITIES AND ADMINISTRATION RATE (Indirect Cost):

<table>
<thead>
<tr>
<th>Type</th>
<th>From</th>
<th>To</th>
<th>Rate</th>
<th>Base</th>
<th>Location</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>10/1/01</td>
<td>9/30/02</td>
<td>60.00%</td>
<td>(a)</td>
<td>On Campus</td>
<td>Organized Research (except JPL)</td>
</tr>
<tr>
<td>Fixed</td>
<td>10/1/01</td>
<td>9/30/02</td>
<td>26.00%</td>
<td>(a)</td>
<td>Off Campus</td>
<td>Organized Research (except JPL)</td>
</tr>
</tbody>
</table>

STAFF BENEFIT RATE:

<table>
<thead>
<tr>
<th>Type</th>
<th>From</th>
<th>To</th>
<th>Rate</th>
<th>Base</th>
<th>Location</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>10/1/01</td>
<td>9/30/02</td>
<td>25.00%</td>
<td>(b)</td>
<td>All</td>
<td>Organized Research (except JPL)</td>
</tr>
</tbody>
</table>

TUITION REMISSION RATE:

<table>
<thead>
<tr>
<th>Type</th>
<th>From</th>
<th>To</th>
<th>Rate</th>
<th>Base</th>
<th>Location</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pred</td>
<td>10/1/01</td>
<td>9/30/02</td>
<td>60.00%</td>
<td>(c)</td>
<td>All</td>
<td>Organized Research (except JPL)</td>
</tr>
</tbody>
</table>
DISTRIBUTION BASES:

(a) Modified Total Direct Cost (MTDC), as defined in OMB Circular A-21, consisting of all salaries and wages, fringe benefits, materials and supplies, services, travel and subgrants and subcontracts up to the first $25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Equipment (defined as having a useful life of two years and an acquisition cost of $5000 or more per unit), capital expenditures, charges for patient care and tuition remission, rental costs, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of $25,000 is excluded.

(b) Total direct salaries and wages of faculty, staff (excluded graduate assistants) including vacation, holiday, and sick leave. (Leave consisting of accrued paid leave for salary and hourly employees and actual paid leave for monthly employees.)

(c) Total direct salaries and wages of graduate assistants including vacation, holiday, and sick leave. (Leave consisting of actual paid leave for Graduate Assistants).

SECTION II - GENERAL TERMS AND CONDITIONS

A. LIMITATIONS: Use of the rates set forth under Section I is subject to any statutory or administrative limitations, and is applicable to a given grant, contract or other agreement only to the extent that funds are available and consistent with any and all limitations of cost clauses or provisions, if any, contained therein. Acceptance of the rates agreed to herein is predicated upon all the following conditions: (1) that no costs other than those incurred by the grantee/contractor were included in the indirect cost pool as finally accepted and that all such costs are legal obligations of the grantee/contractor and allowable under governing cost principles; (2) that the same costs that have been treated as indirect costs are not claimed as direct costs; (3) that similar types of costs have been accorded consistent accounting treatment; and (4) that the information provided by the contractor/grantee, which was used as the basis for the acceptance of the rates agreed to herein and expressly relied upon by the Government in negotiating and accepting the said rates, is not subsequently found to be materially incomplete or inaccurate.

B. ACCOUNTING CHANGES: The rates set forth in Section I of this agreement are based on the accounting system in effect at the time this agreement was negotiated; except as noted in paragraph H. below. Changes to the method(s) of accounting for costs which affects the amount of reimbursement resulting from the use of these rates require the written approval of the authorized representative of the cognizant negotiating agency for the Government prior to implementation of any such changes. Such changes include but are not limited to changes in the charging of a particular type of cost from indirect to direct. Failure to obtain such approval may result in subsequent cost disallowances.
C. FIXED RATES AND CARRY-FORWARD PROVISIONS: The rates set forth in Section I of this agreement are based on estimates of the costs and proposed accounting methodologies for FY 2002. When actual costs for FY 2002 are determined, adjustments will be applied to a subsequent rate negotiation to recognize the difference between the estimated costs used to establish the fixed rates and carry-forward provisions and the negotiated actual costs. Adjustments, as necessary, may also be made for any cost impacts of proposed accounting changes (see paragraph H. below).

D. PREDETERMINED TUITION REMISSION RATE: The predetermined Tuition Remission rate set forth in Section I of this agreement for FY 2002 is subject only to adjustment in accordance with the provisions of OMB Circular A-21.

E. CARRY-FORWARDS: The rates set forth in Section I are inclusive of the following carry-forward amounts:

<table>
<thead>
<tr>
<th>Estimated FY 2000 Under Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organized Research – On Campus</td>
</tr>
<tr>
<td>Staff Benefits</td>
</tr>
</tbody>
</table>

Upon final negotiation of the FY 2000 carry-forward amounts, the difference between the final negotiated and estimated carry-forward amounts will be liquidated in a future rate negotiation.

F. USE BY OTHER FEDERAL AGENCIES: The rates set forth in Section I hereof were negotiated in accordance with and under the authority set forth in OMB Circular A-21. Accordingly, such rates shall be applied to the extent provided in such circular to grants and contracts to which OMB Circular A-21 is applicable, subject to any limitations in part A of this section. Copies of this document may be provided by either party to other Federal agencies which have or intend to issue or award grants and contracts using these rates or to otherwise provide such agencies with documentary notice of this agreement and its terms and conditions.

G. DFARS WAIVER: Signature of this agreement by the authorized representative of California Institute of Technology and the Government acknowledges and affirms the Institute’s request to waive the prohibition contained in DFARS 231.303(1) and the Government’s exercise of its discretion contained in DFARS 231.303(2) to waive the prohibition in DFARS 231.303(1). The waiver request by California Institute of Technology is made to simplify the Institute’s overall management of DOD cost reimbursements under DOD contracts.

H. SPECIAL REMARKS: The Government's agreement with the rates set forth in Section I is not an acceptance of the California Institute of Technology’s (Caltech) accounting system, cost classifications, allocation methodologies, cost analysis studies and proposed accounting changes included in Caltech’s 17 May 2001 FY 2002 forward pricing proposal, supporting data, and Disclosure Statement Revisions Nos 3, 4 and 5. Any reliance by the Government on cost data or methodologies submitted by Caltech is on a non-precedence-setting basis and does not imply Government acceptance. The parties will continue to address any differences regarding accounting systems, cost classifications, allocation methodologies, cost analysis studies, and
proposed accounting changes, as well as resolve any cost impact adjustments, as necessary. The parties will attempt to resolve these differences before finalization of FY 2002 actual costs.

The undersigned hereby declare that the terms of this document have been completely read and are fully understood and voluntarily accepted.

The individuals executing this agreement are authorized to execute for and on behalf of the parties for whom they sign and do so as their free and voluntary act.

FOR THE CALIFORNIA INSTITUTE OF TECHNOLOGY:

[Signature]
ALBERT G. HORVATH
Vice President for Business and Finance

FOR THE U.S. GOVERNMENT:

[Signature]
DEBORAH K. RAFI
Contracting Officer

September 4, 2001
Date

September 5, 2001
Date

for information concerning this agreement contact:
OFFICE OF NAVAL RESEARCH
DEBORAH K. RAFI
INDIRECT COSTS/ONR 242/RM 704
800 N. QUINCY STREET
ARLINGTON, VA 22217
PHONE: (703) 696-5641
E-mail: rafid@onr.navy.mil
# INDIVIDUAL RATE COMPONENTS

**Institution:** California Institute of Technology  
**FY Covered by Rate:** 2002  
**Rate is Applicable to:** Organized Research  
**Type of Rate:** Fixed and Carry-Forward Provisions  
**Negotiation Base:** $101,901,000 ON CAMPUS MTDC $5,846,000 OFF CAMPUS MTDC

<table>
<thead>
<tr>
<th>RATE COMPONENTS</th>
<th>ON CAMPUS</th>
<th>OFF CAMPUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ADMINISTRATIVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. G&amp;A</td>
<td>16.19%</td>
<td>16.19%</td>
</tr>
<tr>
<td>B. DA</td>
<td>8.03%</td>
<td>8.03%</td>
</tr>
<tr>
<td>C. DA Allowance</td>
<td>3.60%</td>
<td>3.50%</td>
</tr>
<tr>
<td>B. SPA</td>
<td>3.29%</td>
<td>3.29%</td>
</tr>
<tr>
<td>D. STUDENT SERVICES</td>
<td>1.76%</td>
<td>1.76%</td>
</tr>
<tr>
<td>E. Administrative Cap Adjustment</td>
<td>(6.87%)</td>
<td>(6.87%)</td>
</tr>
<tr>
<td><strong>Subtotal (should not exceed 26%)</strong></td>
<td><strong>26.00%</strong></td>
<td><strong>26.00%</strong></td>
</tr>
<tr>
<td>2. BUILDING INTEREST</td>
<td>0.65%</td>
<td></td>
</tr>
<tr>
<td>3. DEPRECIATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Building Depreciation</td>
<td>5.09%</td>
<td></td>
</tr>
<tr>
<td>B. Equipment Depreciation</td>
<td>5.60%</td>
<td></td>
</tr>
<tr>
<td>C. Optical equipment Depreciation</td>
<td>2.52%</td>
<td></td>
</tr>
<tr>
<td>4. O&amp;M</td>
<td>15.27%</td>
<td></td>
</tr>
<tr>
<td>5. Utility Cost Adjustment (UCA)</td>
<td>1.30%</td>
<td></td>
</tr>
<tr>
<td>6. LIBRARY</td>
<td>2.57%</td>
<td></td>
</tr>
<tr>
<td>7. CARRY-FORWARDS</td>
<td>1.00% *</td>
<td>0.00%</td>
</tr>
<tr>
<td>8. ROUNDDING</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60.00%</strong></td>
<td><strong>26.00%</strong></td>
</tr>
</tbody>
</table>

* Represents: Estimated FY00 $1,019,011 Institute under-recovery

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**FOR CALIFORNIA INSTITUTE OF TECHNOLOGY:**  
ALBERT G. HORVATH  
Vice President for Business and Finance  
4-Sep-01

**FOR THE GOVERNMENT:**  
DEBORAH K. RAFI  
Contracting Officer  
5-Sep-01

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INDIVIDUAL RATE COMPONENTS

Institution: California Institute of Technology
FY Covered by Rate: 2002
Rate is Applicable to: Staff Benefits
Type of Rate: Fixed and Carry-Forward Provisions
Negotiation Base: $175,990,000 Salaries & Wages

<table>
<thead>
<tr>
<th>Rate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Benefits Pool</td>
<td>24.37%</td>
</tr>
<tr>
<td>FY 2000 Estimated $1,106,000 Institute Under-recovery</td>
<td>0.63%</td>
</tr>
<tr>
<td>Rounding</td>
<td>0.00%</td>
</tr>
<tr>
<td>Net Rate</td>
<td>25.00%</td>
</tr>
</tbody>
</table>

FOR CALIFORNIA INSTITUTE OF TECHNOLOGY:
ALBERT G. HORVATH
Vice President for Business and Finance
4-Sep-01 Date

FOR THE GOVERNMENT:
DEBORAH K. RAFI
Contracting Officer
5-Sep-01 Date

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