

CCAT FINANCIAL AND BUSINESS CONTROLS

P-MIDC-PRC-0007-D

REVISION HISTORY

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	J. Blair	6/15/12	Dy	Dutt	Initial Draft
1.1	J. Blair	6/18/12			Added Training Policy
1.2	J. Blair	6/20/12			Incorporated Accountant Feedback
2.0	J. Blair	5/21/13			Incorporated Stakeholder Feedback
2.1	J. Blair	7/15/13			Reissued according to CCAT Document Standards
2.2	J. Zivick	2/4/14			Revisions per feedback of PDR review
2.3	J. Blair	3/20/14			Incorporated final Stakeholder Feedback
Α	J. Blair	4/17/14	J. Zivick	5/20/2014	Approved & Released
В	J. Blair	8/1/16	J. Blair	8/1/2016	Converted the document to CCAT-p document standards, updated references to federal guidelines, and further clarified CCAT's corporate travel policy.
С	J. Blair	3/1/2021	W. Sibert	3/15/2021	Renamed document to current WBS. Added Credit Card policy, clarified tax and other mandatory filings. Incorporated several minor administrative updates.
D	J. Blair	3/22/2021	W. Sibert	3/25/2021	Revised cover logo; replaced CCAT-prime telescope references with FYST.

APPLICABLE DOCUMENTS

The requirements in the following documents apply, but this document supersedes if there is a conflict.

CCAT Document No.	Version	Title
P-MIDC-STD-0004	Latest	CCAT-prime Simplified WBS

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PURPOSE

The purposes of these Financial and Business Controls are to:

- 1. Provide safeguards for Corporation funds.
- 2. Define or supplement policies and procedures required to facilitate the management of the CCAT Project.
- 3. Define policies and procedures necessary to meet the requirements of 2 CFR Part 215, 2 CFR Part 230, 2 CFR Part 200 subpart F, as well as any additional requirements agreed to as part of grants, contract awards and donations.

ADMINISTRATION PROCESSES AND POLICIES

1.1 FISCAL YEAR

In accordance with Section 7.1 of the Corporation's Bylaws, the Board of Directors (CCAT Board) have designated the Corporation's Fiscal Year (FY) to be from July 1 until the following June 30. All Corporate references to "yearend" are interpreted to mean June 30 of the applicable FY.

1.2 ACCOUNTING

The system of accounts for the Corporation is structured to provide management information and fiscal controls in conformance with applicable guidelines established through 2 CFR, Part 230, as well as grant and contract awards requirements, donation compliance, and reporting requirements. Costs not allowed under grant and contract awards or by donors are segregated in the accounting system.

Financial activity is recorded by the Corporation's accountant based on information transmitted by the Business Manager or other designated member of the Project Office. The accountant maintains copies of this information, which serves as supporting documentation for transactions recorded. Backups of the accounting system are performed daily in accordance with the accounting firm's procedures.

When capital assets are acquired under grants, contracts, or donor awards, the cost of capital fixed assets are recorded as expenditures are incurred. Each month, the accountant reclassifies the expenditure as an asset and enters the asset into the Fixed Asset Inventory records. This accounting treatment facilitates the reporting of fixed assets acquired under grant, contract, or donor awards. The cost of capital assets not acquired under grants, contracts, or donor awards are recorded as an asset and entered into the Fixed Asset Inventory records.

1.3 REPORTING

The accountant transmits financial reports in the form of a Balance Sheet, Income Statement, and Statement of Cash Flows to the Business Manager by the 15th of each month. The Income Statement presents revenues and expenses by grant; contract; and Member. Additional reports needed to fulfill grant and contract, donor, or Member requirements are provided by the accountant as needed.

The Business Manager reviews the monthly financial reports submitted by the accountant.

1.4 AUDITS

Under the oversight of the Corporate Treasurer, the Business Manager will arrange for an annual audit of the Corporation's Yearend Financial Statements. If during the fiscal year the corporation has received a U.S. federal award or had authority over U.S. federal funds, the audit will also comply with the requirements of 2 CFR, Part 200 subpart F. The audit will generally take place in mid-August with results reported in early

October to the Treasurer followed by the CCAT Board's appointed Audit Committee. Ideally, final audit results will be reported to the full Board at the Fall Board meeting. If for any reason final audit results are not available for the Fall Board meeting, the status of the audit will be reported at the Fall Board meeting and, unless the Board directs otherwise, the final audit results will be reported to the Board at the monthly executive committee meeting following completion of the audit. Findings, if any, will be reviewed and tracked by the Audit Committee until fully resolved.

1.5 CONFLICTS OF INTEREST

Any director, principal officer, or member of a committee with governing board delegated powers, who has a direct or indirect financial interest as defined in Corporation's Conflict of Interest Policy shall comply with the Corporation's Conflicts of Interest (COI) Policy.

Individuals appointed to these positions receive a copy of the policy upon their appointment and must return the required acknowledgement to the Corporate Secretary within 30 days of appointment. In addition, these individuals must recertify annually. The annual statements required under the COI Policy are usually accomplished at the Spring Board of Director's meeting; however, in all cases the annual statement must be delivered to the Corporate Secretary no later than July 1 each year.

The COI annual statements are maintained by the Corporation Secretary and retained as Other Legal Documents per the Corporation's Records Retention Policy.

In addition, because of their financial and contracting authority with the Corporation and at Cornell University, the Project Director, Project Deputy Director, Project Manager, and Business Manager at Cornell will work with Cornell's Office of Research Integrity and Assurance (ORIA) to ensure they comply with Cornell's COI policies and file annual COI disclosures, if required, with the university. Coordinating annual requirements with ORIA is the responsibility of the Project Director. People required to file with ORIA will be notified by ORIA. Individuals notified of an ORIA filing requirement must complete their disclosures in accordance with ORIA timelines. Failure to do so could lead to sanctions by Cornell University.

1.6 INTELLECTUAL PROPERTY

The CCAT Agreement governs intellectual property rights. The Corporation requires that scientific discoveries and data resulting from the CCAT's operation must be published or otherwise released to the community in a timely manner. Parties that claim ownership of intellectual property notify the Corporation Secretary in writing. The Corporation Secretary notifies the Project Office and the members of the Board.

1.7 BANK ACCOUNTS AND CASH MANAGEMENT

The Business Manager closely monitors cash flows to ensure funds are available to meet obligations in a timely manner and avoid fees and penalties.

1.7.1 Disbursement Authority and Controls

The CCAT Board Chair, Corporation Treasurer, Project Director, Project Manager and Business Manager are each authorized to prepare and approve/release ACH or wire disbursements on behalf of the Corporation. However, disbursement of Corporation funds requires the active participation of two separate

¹ NOTE: Disbursement authority is separate and distinct from the approval requirements for initiating financial commitments on behalf of the Corporation. No disbursement of Corporation funds may be executed without first ensuring the transaction has been appropriately authorized in accordance with the Corporation's Bylaws or other applicable policies.

individuals regardless of amount ("dual controls"). For ACH or wire transfers, each disbursement requires a disbursement preparer and a separate individual to approve/release the actual funds.²

Two authorized individuals must sign corporation checks. The CCAT Board Chair, Corporation Treasurer, Project Director, Project Manager, Business Manager and Corporation Secretary are each authorized to sign checks. The Corporate checkbook is maintained by the Business Manager in a locked cabinet. When a check is issued, the check number and supporting documentation are forwarded to the accountant for recording into the accounting system.

Individuals involved in a disbursement transaction are required to verify that (1) the disbursement is authorized (e.g., stems from an approved contract or commitment); (2) the disbursement amount is reasonable and correct (e.g., matches the invoice, and the invoice complies with the terms of the contractual agreement); and (3) the account from which the disbursement is drawn has sufficient funds to cover the disbursement.

The Corporation Secretary may prepare (but not approve or release) ACH or Wire transfers.

1.7.2 Cash Receipts

Cash receipts are received by ACH, wire transactions or by check. When a check is received, it is restrictively endorsed (e.g., "For Deposit Only") and stored in a locked cabinet until it can be deposited. Only the CCAT Business Manager and Corporate Secretary keep keys to the cabinet. Checks should be submitted for deposit as soon as possible after receipt. A copy of the supporting documentation and deposit slip is forwarded to the accountant for recording into the accounting system.

1.7.3 Federal Funds and Cash Advances

From time-to-time, CCAT Observatory Inc may be the recipient of a U.S. Federal Funds award (traditionally a grant from the National Science Foundation) either directly or as a subaward from another institution. Because rules regarding the use of U.S. federal funds are complex, the Business Manager will work with the Corporate Treasurer to ensure the Corporation fully complies with all the rules and regulations in effect regarding U.S. federal funds under CCAT's control.

It is often the case, however, upon receiving a significant federal award, that a cash advance may be needed to start associated work. If that is the case, cash advances using U.S. federal funds will be for the minimal amount needed and will be requested as close as administratively possible to actual cash outlays. Note that it is often the case that excess interest earnings on federal funds must be repaid. Interest earned on NSF advances deposited in interest bearing accounts must be remitted annually to the NSF. Interest amounts up to \$500 per year (current as of 2021), however, may be retained by the Corporation for administrative expenses.

1.8 CORPORATE CREDIT CARDS

It is the policy of CCAT to provide select individuals with corporate credit cards for the purpose of conducting CCAT business. In general, CCAT credit card holders include the Corporation Secretary and the Business Manager. Additional credit card holders must be approved by the Project Director.

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² NOTE: This requirement is enforced by the commercial banking software utilized by the Corporation's bank and cannot be changed by an account administrator including the Treasurer without the direct involvement of bank officials.

1.8.1 Credit Card Policies

- 1. All corporate credit cards are the property of CCAT, and authorized users shall take the necessary precautions to ensure the safekeeping of the card.
- 2. Each cardholder must read and sign a statement agreeing to adhere to the corporate card policy.
- 3. The Project Manager is responsible for assuring that the cardholder receives and reads a copy of this corporate card policy prior to issuance of a card.
- 4. Corporate credit cards may not be used for personal expenditures of any kind.
- 5. No cash advances are allowed.
- 6. Payments on a corporate credit card account must be made based on an authorized expense report with payments issued by CCAT. Payments from the personal funds of the cardholder are not allowed. Any exceptions must be documented in writing and signed.
- 7. An expense report for credit card purchases must be submitted within 21 days after receipt of the monthly credit card statement.
- 8. Receipts are required for all expenses. Confirmation statements, shipping receipts or similar reports may be used to document telephone orders or fax orders. Any exception shall be explained in writing and signed.
- 9. Reports will be reviewed for validity and accuracy by the Project Manager prior to being paid.
- 10. Any instance of fraud, suspected fraud, nonauthorized charges, or the loss of a CCAT Credit Card will be reported immediately to the Project Manager as well as to the credit card issuing agency.
- 11. In the case where the Business Manager is also the Project Manager, charges and associated expense reports made by the Business Manager will be forwarded to the Project Director for approval.
- 12. In all cases, if the Project Director is not available to perform their obligations under this policy in a timely manner (i.e., on sabbatical, vacancy in position, etc.), the Project Director's responsibilities will be performed by the CCAT Treasurer, or as otherwise directed by the Chair of the CCAT Finance Committee.

1.8.2 Corporate Credit Card Account Agreement

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As a representative of CCAT, I have been issued a credit card account that bears no interest and has a credit limit of \$ As a condition of the issuance of this account and the granting of such special terms, I agree that I will use this account only for bona fide, acceptable business purposes related to CCAT and that I will not use this account for personal purposes. I understand that I must submit corporate card expense reports within 21 days of receipt of the account statement. I further agree to immediately return the card to CCAT upon termination of my employment by a CCAT member, for whatever reason.
Signature

Print Name and Title Date

1.9 ANNUAL TAX AND OTHER FILINGS

Under the authority and oversight of the Corporate Treasurer, the Business Manager will work with the Corporation's accounting firm to prepare and cross check CCAT Observatory, Inc's annual U.S. tax return which is the U.S. IRS Form 990, Return of Organization exempt from Income Tax. When ready, the Business Manager will forward a copy to the Corporate Treasurer for final review and will facilitate responses to questions or any revisions. Once finally approved by the Corporate Treasurer, the Business Manager will authorize the Corporation's accounting firm to electronically file the return. Copies of the final document will be made available to the Corporate Treasurer and the CCAT Board of Directors.

Any changes to the Corporation's formal address (IRS Form 8822), however, must be coordinated and approved by the Corporate Treasurer and the CCAT Board must be informed.

In general, the first time CCAT must make a new official filing with a tax agency, that filing and the associated forms must be reviewed and approved by the Corporate Treasurer in advance. Once that initial filing is complete, the Corporate Treasurer may authorize the Business Manager to make future filings without formal coordination or approvals. This delegation is solely at the authority of the Corporate Treasurer and may be changed at any time.

Based on previous filings, the Business Manager is authorized to oversee the preparation and submission of the following U.S. IRS forms whenever required: Form 1099-MISC (Miscellaneous Income), Form 1099-NEC (Non-employee Compensation), Form 1096 (Annual Summary and Transmittal of U.S. Information Returns), FinCEN 114 (Report of Foreign Bank and Financial Accounts), and Form 6166 (Certificate of U.S. Tax Residency), and directly related forms. Unless directed otherwise, these documents do not require pre-filing coordination with the Corporate Treasurer, but copies of completed documents will be forwarded upon request.

Finally, CCAT Observatory, Inc. is incorporated in the State of Delaware, USA. As such, the Business Manager will ensure the Annual Franchise Tax filing for Delaware is made in a timely manner. The Business Manager is authorized to make this filing without additional pre-coordination. In addition, because CCAT is incorporated in Delaware, the Corporation is required to have a Resident Agent. Changes to the Resident Agent must be approved by the Corporate Treasurer and informed to the CCAT Board Finance Committee. Once designated, the Business Manager will ensure annual fees required for the services of the Resident Agent are reviewed and paid in a timely manner. No additional pre-coordination is required to make these payments. Confirmation of annual franchise tax and resident agent payments will be made at the Fall Board meeting.

1.10 EXTERNAL OVERSIGHT

The Business Manager may grant on-line "view only" access of Corporation accounts to third parties for account oversight purposes. Individuals granted view only access cannot transact any business in Corporate accounts and are prohibited from disclosing information related to Corporate accounts to any outside person or organization unless authorized by their contract, agreement or law. As a protective measure, "view only" access is granted to the Corporation's accountant.

1.11 TRAINING

Appropriate training is essential to ensure proper compliance with established procedures.

1.11.1 Project Office Staff

Upon hire, new Project Office staff receive training consisting of activities to be completed nominally within the first 30 days of assuming their position.

The Project Director or Project Manager, as applicable, oversees the initial training of newly hired Project Office staff. They ensure:

- 1. New Project Office members receive access to the latest versions of the following documents:
 - a) Bylaws of CCAT Observatory, Inc.
 - b) CCAT Agreement (the "CCAT Agreement")
 - c) Joint Project Agreement
 - d) Project Agreement between CCAT Observatory, Inc. and the University of Cologne (the "UzK Services Agreement")
 - e) CCAT Cornell Services Agreement (the "Cornell Services Agreement")
 - f) ALMA Site Use Agreement
 - g) CCAT-prime Permit Agreement with the Atacama Astronomy Park
 - h) Applicable Written Actions of the Board of Directors
 - i) Current version of P-MIDC-PRC-0007 CCAT Financial and Business Controls
 - j) Any other documents applicable to the member's position.
- 2. That members read these documents and are scheduled to meet with the Project Manager and Business Manager, as applicable, to have questions answered.
- 3. If the new member is the Project Director or Project Manager, a meeting or conference call with the CCAT Board Chair is scheduled.
- 4. If the new member is the Business Manager, that individual is scheduled to meet with the Corporation Treasurer for an introductory meeting and review mutual responsibilities and expectations. If the Corporation is a federal subaward, the Business Manager is also introduced to their points of contact in CCAT's assigned Financial Transaction Center as well as the Office of Sponsored Programs at Cornell. Further, this individual meets with the Corporation's accountant and receives copies of the latest audited financials, audit results, and any open action items. Training on JP Morgan Chase on-line financial systems is arranged with JP Morgan Chase customer service representatives.

1.11.2 Other Staff

Training requirements of the Deputy Project Director, Project Engineer, Project Scientist, and Administrative Assistant are determined by the Project Director.

The Board determines the training requirements for newly assigned CCAT Board members. The Member institution assigning the Board member may supplement those requirements. Regardless of training requirements, new Board members receive all the documents listed in Section 1 of the Initial Training section above from the Corporate Secretary or his/her designee.

1.12 TRAVEL

1.12.1 Travel Requirements for Member Sponsored Travel

Most travel for CCAT-related business is the financial responsibility of the Member organization sponsoring the travel. As such, travel documentation and reimbursement procedures are submitted and paid for in accordance with the sponsoring Member's policies. Insurance and liability for the traveler is also the responsibility of the sponsoring Member organization. Note, however, that regardless of a Member

organization's travel policies, if the travel is submitted to the Corporation as an In-kind Contribution, the general requirement below is applicable. The CCAT Board Chair, Project Director or Project Manager must approve exceptions to this requirement.

CCAT Policy: A traveler on CCAT-related business has the responsibility to act prudently and only incur expenses that are necessary, appropriate, and reasonable. Travel arrangements should use the most cost-efficient means available to meet the programmatic requirements of the trip, as well as comply with any more stringent funding source requirements.

1.12.2 Travel Requirements for Corporation Sponsored Travel

The Corporation may directly sponsor travel for an individual. In such cases, the Board Chair, Project Director, or Project Manager must grant approval. When the Corporation directly sponsors a traveler, that travel is coordinated with or arranged by the Project Office in accordance with the requirements below and the Project Office is responsible for receiving, reviewing and paying the allowable portion of any travel voucher. When directly sponsored by the Corporation, the travel is directly charged to a CCAT Corporate account or reimbursed from a CCAT Corporate account. Travel expenses paid for by the Corporation may not be claimed for In-Kind Credit by a Member institution.

1. General

A traveler on CCAT-related business has the responsibility to act prudently and only incur expenses that are necessary, appropriate, and reasonable. Travel arrangements should use the most cost-efficient means available to meet the programmatic requirements of the trip, as well as comply with any more stringent funding source requirements.

2. Documentation of Expenses

Expenses for meals, lodging and other costs shall be reasonable and consistent with the cost of such services at the destination. Reimbursement for meals may be based on documented expenses or published per diem rates applicable for the destination.

Reimbursement for individual costs greater than \$75 USD requires a receipt; however, receipts for airline tickets, hotel stays, rental cars, and rental car fuel are required regardless of the amount.

Hotel receipts should state the dates of stay, room rate, applicable taxes, and any additional charges (i.e., a standard credit card receipt showing only the total amount paid is not acceptable documentation).

Rental car receipts should likewise show the dates of the rental as well as surcharges and fees. CCAT will not reimburse travelers for frequent flier fees or other incentives charged on a rental car agreement. While not required, in order to minimize costs, travelers are requested to fill the gas tank before returning a rental car rather than purchasing a pre-paid fuel option. Likewise, travelers are discouraged from adding GPS devices or other options to their rental car agreements as a matter of convenience. These options should only be added if the traveler believes them to be a legitimate need. Travelers, however, should always include appropriate insurance options on their rental car.

3. Submission Timelines

The traveler is responsible for prompt submission of travel-related expenses. Final reimbursement documentation must be received no later than 60 days after the completion of travel unless otherwise approved by the Project Office. Final documentation means that any additional information or documentation required by CCAT to process payment to the traveler has been received, not merely the initial request for reimbursement by the traveler. Therefore, travelers are advised to submit travel

reimbursement claims no later than 45 days after completion of travel and to notify their sponsor if they may be unable to meet that deadline.

4. Personal Vehicle Use

Reimbursement for personal vehicle use is made at the then current rate established by the United States Internal Revenue Service, which rate shall be deemed to include the cost of fuel and other operating expenses of the motor vehicle. In addition to the standard mileage allowance, tolls and parking fees are also reimbursable expenses. The Corporation does not reimburse travelers for parking tickets, fines for moving violations or vehicle towing charges. Mileage is measured from either the traveler's home or the working address to the destination and return, whichever is less. Mileage between a traveler's residence and place of work is not reimbursed.

5. Air Travel

Travelers are expected to book the lowest-priced economy class rates available. The person booking the travel (the traveler or the Project Office as applicable) is responsible for obtaining the most economical airfare available consistent with the purpose of the trip. Whenever possible, travelers should take advantage of discounts and purchase airline tickets 14 days or more in advance. Unless approved by the Project Office, the Corporation does not reimburse upgrades to Business and First Class seating. In addition, the Corporation does not pay for larger/more room seat fees or early bird check-in fees without prior written approval from the Project Office and a clear business need or medical/physical reason. Travelers who choose to upgrade must pay the difference between the lowest priced nonstop economy class fare and the final fare. Complete documentation of such arrangements must be submitted with the request for reimbursement. Air carrier selection cannot be biased by the traveler's frequent flyer affiliation. The lowest cost air travel should take precedence.

The Corporation does not reimburse travelers for tickets purchased with frequent flyer miles. The Corporation does reimburse individuals for change or cancellation penalties imposed by the airlines provided the change or cancellation was caused by unavoidable circumstances. Individuals must submit supporting documentation with their request for reimbursement along with a Refund/Exchange Notice showing the amount of penalty.

6. Travel Status

Unless they are attending a local conference or retreat, travelers are considered to be on travel status only if they are traveling on approved Corporation business away from both home and the traveler's normal working address. For the purpose of clarifying policy for out-of-state, overnight travel, "away" is defined as a distance of fifty miles. This means that an employee may be reimbursed for both lodging and meals only if the destination is fifty miles or more from either the employee's home or assigned working address. When personal and business travel is combined, expenses must be clearly documented and may not exceed the lowest available cost of a direct or uninterrupted route. If the traveler uses an indirect route or interrupts travel for personal convenience, any additional expenses incurred are the sole responsibility of the traveler.

7. Per Diem and Honorarium

Unless specified differently in an invitation letter, CCAT will pay daily per diem rates in accordance with federal guidelines. Specifically, CCAT will use the General Services Administration's published rates for travel to the continental United States (lower 48 states), the Department of Defense's published rates for travel to Alaska, Hawaii, U.S. Territories and Possessions, and the State Departments published rates for all other travel.

In select cases, an appropriate honorarium might be paid to individuals supporting CCAT project goals. When applicable, honorarium amounts and associated conditions will be specified in an invitation letter PRIOR to the start of travel. Honorariums must be pre-approved by either the CCAT Board Chair, the Project Director or the Project Manager. Honorariums are taxable income to the recipient and people receiving honorariums will receive appropriate tax forms. People receiving an honorarium (or other potentially taxable income) will have to provide the CCAT Project Office with a completed IRS Form W-9 (U.S. nationals) or W-8BEN (non-U.S. nationals) before payment can be made. If a non-U.S. national is a member of a country that does not have applicable tax treaty rights with the United States, appropriate taxes will be withheld from the honorarium (or other taxable payments) and remitted on the individual's behalf to the U.S. IRS.

8. Spousal Travel/Domestic Partner Travel

Unless specifically authorized by the Project Office, travel expenses for a traveler's spouse/domestic partner are not reimbursable. In addition, any additional costs incurred over what the Corporation would have provided for the unaccompanied traveler (i.e., a larger hotel room, or larger rental car) is the responsibility of the traveler.

9. International Travel

Travelers traveling internationally on CCAT-sponsored business are reimbursed for the same travel expenses as someone who travels domestically. They may also be reimbursed for passport fees, exchange rate fees, and other items necessary for conducting Corporation business. Hotel receipts are required for both domestic and international travel. Reimbursement amounts should be converted from foreign currency to U.S. dollars before submitting the expense report. The applicable exchange rate for the dates of travel can be found at: www.x-rates.com. Rates that were current at the time of travel can be found at that site's "Historical Lookup." Receipts should have an explanation and translation in addition to being converted to US dollars.

10. U.S. Federally Funded International Travel

The Fly America Act was enacted in 1974 to mandate the use of U.S. flag air carriers for U.S. federally funded international travel. Federally sponsored trips must utilize U.S. flag carriers at the lowest available rates. A letter of justification must be included with the travel expense voucher if other than lowest rates are charged. Federal regulations prohibit the charging of business class or first class air travel to federally sponsored projects. They also prohibit the inclusion of indirect costs.

Airline "Open Skies" Agreements: A foreign flag air carrier may be used if the portation 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".

1.13 RECORDS RETENTION

The Records Retention and Disposition Schedule indicate the minimum length of time CCAT must retain their records before they may be disposed. Sensitive records should be destroyed by means that prevents easy reconstruction (e.g., shredding for paper documents, breaking for magnetic media, and data wiping for electronic media). The purposes of this Schedule are to:

- 1. Ensure records are retained as long as required for administrative, legal and fiscal purposes;
- 2. Ensure state and federal record retention requirements are met;
- 3. Ensure record series with enduring historical and other research value are identified and retained permanently; and

4. Encourage and facilitate the systematic disposal of unnecessary records.

Record Retention Schedule

Articles of Incorporation	Permanent
Annual financial statements including compliance audit reports	Permanent
Bylaws and all amendments thereon	Permanent
Business Licenses	Permanent
Correspondence	
- General	6 years
- Legal	Permanent
- Members	6 years
Federal, state and local exemption applications including related	Permanent
correspondence	
Minutes of the Board of Directors and any committee with similar	Permanent
responsibilities	
Patents, trademarks and other intangibles	Permanent
Other legal documents	Permanent
Grants and contracts	6 years
Gift letters and agreements	Permanent
Insurance policies	6 years
Settled insurance claims	3 years
Income tax and informational returns	Permanent
Other federal/state forms (1099s, 1096, 941, etc.)	7 years
Annual budgets and approved revisions thereon	6 years
Bank reconciliations	6 years
Bank statements, cancelled checks, bank credits and debits	6 years
Books of original entries, such as	6 years for all
- Cash receipts/Accounts Receivable	
- Cash disbursements/Accounts Payable	
- Sales	
- Purchases	
Chart of Accounts	6 years
Contracts, leases and similar agreements relating to purchase and	6 years (after disposition of
sale of assets	asset)
Capital Asset and depreciation records	Life of the asset; records of
	equipment purchased with
	Federal funds must be retained
	for 3 years after final
Company and subsidiant ladgemen	disposition
General and subsidiary ledgers Internal and interim financial statements	6 years
	6 years
Investment custodial and advisory statements	6 years
Vendor invoice, travel reimbursements, and other supporting documentation	6 years
documentation	

BUDGETING PROCEDURES

The CCAT Board of Directors oversees, reviews and approves the annual budget and any budget modifications.

The Business Manager, under the direction of the Project Manager and the Project Director, prepares, monitors, and reports to the Board on all budgets. The Business Manager monitors CCAT's expenditures, reviews the actual and budgeted expenditures, and reports on the progress of such expenditures. In addition to monitoring the budget of the Corporation as a whole, the Business Manager also monitors budgets for individual grants issued to the Corporation.

Annual budget planning generally begins in February. Budgetary expense estimates are based on the current operational expenditure rate of the Corporation projected through the end of the corporate fiscal year, plus all known and anticipated contractual costs anticipated for the coming fiscal year. Budgetary income projections are based upon the funding commitments made or anticipated by Member organizations, as well as actual or reasonably anticipated grants or sub awards to the Corporation. The Business Manager drafts these projections into a proposed budget and presents them to the Board for review and comment traditionally at the Spring Board meeting. Upon receiving Board approval, the Business Manager will invoice Partner institutions in accordance with each Partner's funding commitment or as otherwise approved by the Board.

The Business Manager prepares financial reports semi-annually (or more frequently, if required by the Board or grantors) showing year-to-date expenditures, any variation from the budget estimates, and indicates any increases or decreases in funding.

At the Fall Board of Directors meeting, the Business Manager compares the previous year's budget against actual expenses and explains any significant differences. In addition, the Business Manager reviews the status of the current budget and if actual or anticipated expenses are now significantly out-of-line with prior projections, the Business Manager will coordinate and present a revised budget for Board review and approval. If approved, a supplemental invoice may also be issued to Partner institutions in line with the revised budget.

CORPORATION ASSETS

The Corporation shall accurately record and account for the Corporation's assets³ on a regular basis as provided below.

1.14 CAPITAL FIXED ASSETS

Capitalized fixed assets are items that are:

- 1. Permanent in nature, tangible and durable (economic useful life greater than one year);
- 2. Held for purposes other than investment or resale; and
- 3. Have a cost that equals or exceeds the thresholds established by the Corporation in accordance with federal guidelines or as noted below.

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³ NOTE: This policy applies to capital assets procured directly by the Corporation. Capital assets procured by the Members for the CCAT Project will be recorded and capitalized in accordance with that Member's host-institution procedures. CCAT will record these capital assets when they are transferred to the Corporation in accordance with the In-Kind Contribution sections of the CCAT Agreement or other applicable policies.

1.15 CAPITALIZATION POLICY

For the purposes of the Corporation, land, moveable equipment, fixed equipment, and fabricated equipment costing \$5,000 or more is capitalized. In addition, buildings, building improvements, land improvements, and infrastructure assets costing \$100,000 or more are capitalized.

Assets costing below \$5,000 are expensed in the fiscal year of purchase and are not capitalized.

The only exception for capitalizing items that cost less than \$5,000 is for low cost equipment needed for the initial outfitting of a tangible capital asset or operational unit, or an expansion or renovation to either. Equipment for this treatment should be budgeted and charged to the capital project as equipment. Costs incurred to keep a fixed asset in its normal operating condition that do not extend the original useful life of the asset or increase the asset's future service potential are not capitalized. These costs are expensed as repairs or maintenance.

1.15.1 Classifications and Accountable Thresholds for Capital Fixed Assets

The Corporation has the following types of capital fixed assets: equipment (moveable, fixed, and fabricated), land, land improvements, buildings, building improvements, and infrastructure. The definition and procedures for classifying and accounting for these assets are defined in the following subsections.

1.15.1.1 **Equipment**

Equipment consists of property that does not lose its identity when removed from its location and is not changed materially or expended in use. Subclasses include computer equipment, audiovisual equipment, office equipment, athletic equipment, recreational equipment, lab and research equipment, appliances, medical equipment, food service equipment, buildings and ground equipment, heavy equipment, furniture, and fixtures.

Equipment can be further categorized as moveable, fixed, or fabricated as defined below.

- 1) Moveable Equipment is not permanently affixed to or part of a building. Some moveable equipment consists of more than one component (e.g., a computer, keyboard, mouse, and monitor). The assembled components may be considered one item and be recorded as a single capital asset. Component items, which form part of a larger system, are combined for capitalization purposes. The "system" definition applies to computer configurations, AV equipment and scientific equipment. Additions to equipment that become either component parts or permanently connected to existing equipment items are also defined as equipment and should be capitalized, regardless of cost.
- **2) Fixed Equipment** is permanently affixed to a building but is separate from the building itself. Examples of fixed equipment are light fixtures, wall-to-wall carpeting, water fountains, fire control apparatus, fume hoods, auditorium and fixed classroom seats, and built-in display cabinets.
- 3) Fabricated Equipment is a new piece of discrete equipment that requires creative effort to design and extensive effort to physically construct and assemble. Once complete, it is freestanding and a complete functional entity. Fabricated equipment does not lose its identity when affixed to or installed in other property. Connecting components together in a system (physically or virtually) does not constitute equipment fabrication. Software development is not considered fabrication. However, software that is an integral component of a fabrication effort can be considered part of the fabrication if the software is necessary for the fabricated equipment or instrument to work.

The value of a fabricated asset is equal to the total U.S. federal allowable costs associated with its construction. These costs include the following:

a) Original invoice prices paid for components;

- b) All costs for shipping, handling, in-transit insurance, and storage related to delivery and installation of the asset's components;
- c) All of the asset's installation costs, including site preparation;
- d) All testing costs;
- e) All books, manuals, and training necessary for the asset's operation.
- f) Costs that are not allowable on a fabrication effort include, but are not limited to, academic personnel labor (e.g. salaries for faculty, graduate research assistants, postdocs, senior research associates); books; periodicals; memberships; computer maintenance and repair; copying and fax usage; entertainment; equipment maintenance and repair; facility rental; food; legal expenses; meetings, conferences, symposia; travel (unless directly related to the installation of the fabricated equipment); software acquisition and/or development unless necessary for the fabricated equipment or instrumentation to operate; Visa applications. While a Member organization may claim these costs for credit in accordance with the In-Kind Contribution Policy, the costs are not included in the value of the capital asset.

Equipment (moveable or fixed) costing \$5,000 or more, and fabricated equipment valued at \$5,000 or more, is capitalized.

1.15.1.2 Land

Land is the solid part of the earth's surface whether improved or unimproved. Land should include all land in which the Corporation has a legal interest. Purchased land should be carried on the records at cost. Donated land should be recorded at the appraised market value of the land at the time of its donation.

Land costing \$5,000 or more is capitalized.

1.15.1.3 Buildings

Buildings are roofed structures used for the permanent or temporary shelter of persons, animals, plants, or equipment.

Buildings accounts should include the value of all buildings at purchase price or construction cost by location. When buildings are constructed, all identifiable direct costs are included in the valuation. Direct costs include labor, material, and professional services to construct the building, together with insurance, interest and other costs incurred during the period of construction to ready the building for its intended use.

Buildings costing \$100,000 or more are capitalized.

1.15.1.4 Building Improvements

Building Improvements are improvements made to existing buildings. Any renovation or alteration to an existing building that adds useful space to the structure or extends the facility's useful life is considered a capital asset. Conversely, improvements that do not add useful space to the structure or extend the facility's useful life are considered maintenance and repair.

Building improvements costing \$100,000 or more are capitalized.

1.15.1.5 Infrastructure

Infrastructure consists of long-lived capital assets that typically are stationary in nature and can be preserved. Infrastructure assets include roads, bridges, tunnels, drainage systems, water and sewer systems, dams, and lighting systems. It can also consist of land improvements such as excavation, fill and grading, as well as removal, relocation, or reconstruction of the property of others.

Infrastructure assets costing \$100,000 or more are capitalized.

1.15.2 Special Capitalization Case - Internal Use Software

Internal use software is software that meets the following tests – it must be acquired, internally developed, or modified solely to meet CCAT's internal needs, and during the software's development or modification, the Corporation must not have a substantive plan to market the software externally to other organizations.

Software implementation generally involves three phases. These phases and their characteristics are as follows:

- Preliminary project phase Stage when conceptual formulation of alternatives, evaluation of alternatives, determination that the technology needed to achieve performance requirements exists, and the final selection from among the alternatives is made.
- Application development/implementation phase Design of chosen path including software configuration and software interfaces, coding, installation of computer hardware, testing, including parallel processing phase, employee and consultant travel expenses and consultant fees.
- Post-implementation/operation phase Training and application maintenance activities incurred after phase two is complete.

Costs associated with the preliminary project and the post-implementation/operating phase should be expensed as incurred. Internal and external costs associated with the application development phase should be capitalized if those aggregated costs are or exceed \$5,000. Costs to develop or obtain software that allows for access or conversion of old data by new information systems should also be capitalized if they meet the \$5,000 threshold. General and administrative costs and overhead expenditures associated with software development should not be capitalized as costs of internal use software. Training costs are not internal use software development costs and, if incurred during this stage, should be expensed as incurred.

1.15.3 Special Capitalization Case - Gifts in Kind

Gifts of donated capital assets that meet the appropriate cost threshold and have a useful life greater than one year are added to the fixed asset inventory records to ensure an accurate accounting of all equipment owned by the Corporation. Valuation of the gift is recorded at the appraised market value of the item at the time it is donated.

1.16 RECORDKEEPING

The following information (as applicable to the asset) is maintained on all capital assets:

- A description of the equipment.
- Manufacturer's serial number, model number, Federal stock number, national stock number, or other identification number.
- Source of the equipment, including the award number.
- Whether title vests in the recipient or the Federal Government.
- Acquisition date (or date received if the equipment was furnished by the Federal Government) and cost.
- Information from which one can calculate the percentage of Federal participation in the cost of the equipment (not applicable to equipment furnished by the Federal Government).
- Location and condition of the equipment and the date the information was reported.

- Unit acquisition cost.
- Ultimate disposition data, including date of disposal and sales price or the method used to
 determine current fair market value where a recipient compensates the Federal awarding agency
 for its share.

1.17 RECORDKEEPING UPDATES AND REVIEW

In order to maintain adequate recordkeeping and help safeguard Corporation property, equipment records require periodic updating and maintenance to remain current and valuable. The Business Manager notifies the accountant monthly with information on capital asset acquisitions, transfers, sales of surplus, disposals and corrections. The accountant enters applicable information into the property management system. If needed, the Business Manager generates and issues a property tag. In addition, the entire inventory database is updated each fiscal year as part of the annual equipment inventory.

1.18 EQUIPMENT INVENTORY

The accountant maintains the official list of accountable, Corporation-owned property.

Accountable property is physically inventoried annually, no later than March 1. The purpose of a physical inventory is to verify the existence and condition of equipment and ensure the accuracy of CCAT accounting records.

The Business Manager receives the list of accountable property from the accountant. Because CCAT-owned property can be located in numerous locations worldwide, the Business Manager may task out subsets of the inventory to Member organizations based on equipment location.

Individuals tasked with conducting portions of an inventory may further delegate the physical inventory to others as long as the item under inventory is actually located and the required information is physically verified. The individual tasked by the Business Manager, however, is the person held responsible to reporting inventory results to the Business Manager by the requested due date.

Inventory results are sent to the Business Manager within 30 days of tasking. The Business Manager consolidates the results.

Discrepancies in the inventory (missing items, incorrect serial or model number, excessive change in equipment condition, etc.) are noted and investigated by the Business Manager or his/her designee. Results of the inventory are reported to the Corporate Treasurer and the accountant.

Unresolved discrepancies or uncompleted inventories are reported to the Board of Directors at the Spring Board meeting. Following that Board meeting, unless otherwise directed, the Executive Committee is kept informed of these issues until they are resolved.

1.19 PROPERTY TAGS

Most of the capital assets acquired by the Corporation will ultimately be located at the Observatory site in Chile. As accountable equipment is acquired or fabricated, a property tag is affixed to the asset for asset tracking and inventory requirements.

When a capital asset is procured by the Corporation, or accepted as an In-Kind Contribution by the Corporation, the Business Manager or designee obtains the required information and forwards it to the accountant. The accountant enters the information into the property management database and the Business Manager or his/her designee generates and issues a property tag.

If the property is located at a location remote to the Project Office, the Business Manager forwards the property tag to the responsible agent for the property and has that agent affix the tag to the asset. If another

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organization's property tag is located on the equipment, that tag is removed at the time the Corporation tag is affixed. NOTE: If removing another organization's property tag, the Corporation strongly recommends the responsible agent notify that organization of the tag's removal in order to ensure that organization has properly removed the asset from their property management system.

Once a CCAT Corporation property tag is affixed, the property should only be used for CCAT-approved purposes unless the Corporation has granted permission.

Lost or stolen property should be reported to the Business Manager as soon as possible. In addition, changes in the assets location or to the asset's condition should be reported to the Business Manager in a timely manner (generally three business days). The Business Manager coordinates status changes with the contract accountant.

1.20 DEPRECIATION POLICY

Depreciation is the allocation of the total acquisition cost of a fixed asset over its estimated useful life. The estimated useful life of a depreciable asset is the period over which services are expected.

Land, certain land improvements, construction-in-progress, and similar assets are not depreciated. Land is considered to have an unlimited useful life and its salvage value is unlikely to be less than its acquisition cost.

Depreciation of fixed assets is computed on a straight-line basis over their estimated useful lives as follows:

•	Land Improvements	10 - 20 years
•	Infrastructure	5 - 20 years
•	Buildings	15 - 90 years
•	Software	3 - 5 years
•	Building Improvements	10 - 80 years
•	Equipment	3 - 20 years

The Business Manager, with the assistance of the Project Manager, Project Engineer, Chief Scientist, or other experts as necessary, assigns a useful life based on the type of asset.

No depreciation is computed in the Corporation's fiscal year assets are acquired and a full year's depreciation is computed in the fiscal year of disposition.

Depreciation is calculated and recorded on a monthly basis for financial reporting purposes.

1.21 DISPOSITION OF ASSETS

Surplus, obsolete equipment, or other assets, may be disposed of by discarding, scrapping, trading-in, donating, or selling. In rare cases, equipment may have to be disposed of by destruction if required by import control regulations. Prior to disposing of assets, approval must be obtained as follows:

- Disposal of assets with an initial value below \$5,000 may be authorized by Project Director, Project Manager, or Business Manager;
- Disposal of assets with a value between \$5,000 and \$250,000 shall be approved by the Board Chair;
- Disposal of assets with a value between \$250,000 and \$500,000 shall be approved by the Executive Committee;

- Disposal of assets with a value in excess of \$500,000 shall be approved by the Board; and,
- Disposal of any assets procured with federal funds (regardless of value) shall be done in accordance with applicable federal regulations.

The Project Manager is responsible for submitting disposal requests to the Board Chair, as well as any applicable funding sources. The Project Manager may delegate this responsibility. The Business Manager is informed of all disposal requests.

The Business Manager is responsible for communicating changes to the accountant when a change to the disposition of assets occurs. Records related to the disposal are kept by the Project Office per the Corporation's Records Retention Policy and by the accountant.

Before disposal, tags and official Corporate seals or logos should be removed. Before disposing of computer equipment, all data and licensed software must be permanently removed.

If equipment is to be certified and destroyed, the Project Office issues special instructions after approval to dispose of the equipment has been received.

At each semi-annual Board meeting, the Board is informed of all disposal decisions and associated actions since the previous Board meeting.

FINANCIAL IRREGULARITIES TO INCLUDE FRAUD, WASTE, AND ABUSE

Individuals who uncover an instance of suspected or documented financial irregularity, or who know of or suspect incidents of fraud, waste, or abuse ("FWA") related to the Corporation must report it immediately.

Financial irregularities are considered to be an act, misstatement, or omission of information that is intentional and detrimental to the financial interests of the Corporation.

Fraud is a false representation about a material fact. It is any intentional deception designed to deprive the Corporation of something of value or to secure from the Corporation for an individual, a benefit, privilege, allowance, or consideration to which he or she is not entitled.

Waste is the extravagant, careless, or needless expenditure of Corporation funds, or the consumption of Corporation property, that results from deficient practices, systems, controls, or decisions. The term also includes improper practices not involving prosecutable fraud.

Abuse is the intentional misuse of Corporation resources or authority. Examples include misuse of position, or authority or misuse of resources such as tools, test equipment, or copying machines.

Individuals who suspect the occurrence of financial irregularities or FWA must immediately notify the Corporation Treasurer (the "Treasurer"). As appropriate, the Treasurer notifies the Board Chair and then determines and implements the best method to investigate the situation. All parties involved handle the reporting and investigating in a confidential manner until a final determination of facts has been made. The Treasurer communicates the investigation findings to the CCAT Board Chair along with any recommended actions. The Chair initiates or authorizes any needed follow-on actions.

It is contrary to the values of CCAT Observatory, Inc., for anyone to retaliate against any board member, officer, Partner institution employee, volunteer or other person who in good faith reports an ethics violation, or suspected violation of law, such as complaint of discrimination, or suspected fraud, or suspected violation of any regulation or policy governing the operations of CCAT Observatory, Inc. Anyone who retaliates against someone who has reported a violation in good faith is subject to sanction up to and including having their relationship with CCAT Observatory, Inc. and the CCAT project terminated.

Examples of FWA include, but are not limited to, the following:

Accounting and financial reporting irregularities	Deliberate misstatement of revenues, expenses, assets, liabilities, and net assets.
	Purposely misreporting transactions to conceal the true accounting picture.
	Accounting and financial reporting errors known to management that they have failed to correct.
Conflict of interest and purchasing ethics	Using a Corporate position for personal financial gain.
1	• Examples include contracting with a vendor who is a family member of a Corporation Board member, or giving, receiving, or soliciting gifts or items of value from a vendor.
Misuse of Corporate assets	Using Corporation resources for personal use.
	Examples include using Corporate-owned property, tools or test equipment for personal use without prior authorization.
Payroll and time abuse	Inappropriate reporting of in-kind salary contributions from Member institutions.
	• Examples include reporting in-kind salary contributions that were not appropriately related to the CCAT Project, reporting in-kind academic salaries that are not otherwise approved by the CCAT Board of Directors, or requesting in-kind credit for indirect costs on approved salaries or benefits.
Theft or conversion of Corporate property	Act of unlawfully taking Corporation assets such as cash or equipment and converting them for personal use or selling them for personal gain.
Improper purchasing and expenditures	Purposeful, unauthorized, or falsified purchases or expenditures for personal gain or in violation of funding restrictions.
	• Examples may include purchases of computers for personal use, falsified travel reimbursements, purchasing of alcohol with state or federal funds.
Falsification of contracts, reports, or records	Altering, fabricating, destroying, misrepresenting, or forging contracts or documents for personal gain or unfair advantage.
	Examples include forging the signature of a Corporate official on a legal document or applying a digital signature without authorization.
Improper disclosure of confidential records	Unauthorized disclosure Corporation proprietary information or other confidential information in the custody of the Corporation under an obligation of confidentiality.
	For example, disclosure of information subject to a non-disclosure agreement.

Other financial matters	• Inappropriate reporting of in-kind contributions for recognition by CCAT from Member institutions.
	• Examples include reporting in-kind contributions that were not appropriately related to the CCAT Project, misrepresenting the value of in-kind contributions, or knowingly requesting in-kind credit for unauthorized indirect costs.
	• Improper accounting or financial practices, not categorized above, which lead to a financial detriment to the Corporation.

IN-KIND CONTRIBUTIONS FOR TOTAL FINANCIAL CONTRIBUTION CALCULATIONS

This policy is intended to establish the terms of acceptance and valuation procedures that the Corporation uses to accept Member organization's In-Kind Contributions for Total Financial Contribution credit in accordance with the CCAT Agreement.

1.22 EFFORT CERTIFICATION

The Corporation does not generally employ personnel. Research and management activities are performed by the Member organizations in accordance with the personnel policies in place at each institution.

Member institutions follow their internal policies regarding effort certification. However, because the Corporation may receive and utilize federal funds, Member organizations must ensure that all effort attributed to CCAT-related contracts and sub awards involving U.S. federal dollars comply with appropriate U.S. Federal requirements.

1.23 SUBMISSION GUIDELINES

Member institutions shall submit claims for In-Kind Contribution credit to the Business Manager. To facilitate financial reporting to the Board of Directors, all CCAT Members are requested to use the following guidance when submitting CCAT financial data.

1.23.1 General provisions

- 1. All submitted costs must be related to the CCAT Project or its research goals.
- 2. The Business Manager provides a template in Microsoft Excel format with which to submit data. An example of the template is contained in Appendix A.
- 3. All Members should submit their costs in their native currency. The Business Manager converts foreign currencies into U.S. dollars using direction approved by the CCAT Board.
- 4. For institutions that charge institutional overhead or indirect costs (IDC), do <u>not</u> include those costs in the expense categories listed in section 6.2.2, subparagraphs 1 through 10. Instead, aggregate those charges and report the consolidated number as detailed in section 6.2.2, subparagraph 11.
- 5. For long-term contracts or commitments, unless requested otherwise, please submit actual costs paid during the specified reporting period and not the actual contract value. So, if an institution issues a two-year \$100,000 contract, but has only paid \$50,000 during the requested reporting period, record \$50,000. Place the full contract value in the notes.

6. All costs should be attributed against the current CCAT Work Breakdown Structure (WBS). The latest version of the WBS (P-MIDC-STD-0004) is located in the CCAT Document Repository. Place charges in the column associated with the applicable WBS. NOTE: Payments made by Members to CCAT Observatory, Inc. for the Corporation's Operating Budget should be reported under WBS 9 (Operations).

1.23.2 Expense Categories & Instructions

- 1. Salaries. Salaries are broken down into Academic, Engineer, Scientist, and Staff.
- <u>a. Academic Salaries</u>. Unless otherwise approved by the Board, <u>salary</u> related costs should <u>not</u> be submitted for academic appointments (i.e., professors, research faculty, Postdocs, graduate and undergraduate students whose appointments are academic or teaching related). Research faculty and Postdoc salaries, however, may be included if working directly on CCAT science or technical goals. Report those Postdocs in accordance with subsection c below. If requesting Board approval to include an academic salary (regular salary, summer salary, sabbatical salary, etc.), please provide relevant information in the notes.
- **b.** Engineer Salaries. Report salaries based on the following Board-approved minimum rates.

For comparison and reporting purposes, multiply the appropriate minimum rate below by the fractional portion of the year the individual was assigned to the CCAT Project. Compare that number to the actual cost of the individual's salary plus benefits. Report the higher number for that individual. Do not include indirect costs or other institutional overhead when making these calculations.

Example: Senior Engineer was paid \$90,000 for 10 months of CCAT Project work.

Actual cost:

Salary incurred 40% benefit rate, so total salary plus benefits = \$126,000 [\$90,000 salary + \$36,000 benefits (40%)].

Comparison:

Board-approved min for salary + benefits for this position is \$150,000/year. For 10 months of CCAT work, that salary would equate to \$125,000. [(\$150,000 salary/12 months) * 10 months worked].

Result:

\$126,000 is greater than approved minimum of \$125,000; report \$126,000.

- i. **Lead Engineer** (> 20 years of experience): Board-approved minimum is \$150,000/year. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.
- ii. **Senior Engineer** (From 10 to 20 years of experience): Board-approved minimum is \$150,000/year. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.

- iii. **Junior Engineer** (< 10 years' experience): Board-approved minimum is \$125,000/year. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.
- c. Scientist Salaries. Report numbers based on the following Board-approved minimum rates.

For comparison and reporting purposes, multiply the appropriate minimum rate below by the fractional portion of the year the individual was assigned to the CCAT Project. Compare that number to the actual cost of the individual's salary plus benefits. Report the higher number for that individual. Do not include indirect costs or other institutional overhead when making these calculations. See subsection b above for an example.

- i. **Lead Scientist** (> 20 years of experience): Board-approved minimum is \$140,000/year. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.
- ii. **Senior Scientist** (From 10 to 20 years of experience): Board-approved minimum is \$140,000/year. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.
- iii. **Junior Scientist** (From 5 up to 10 years' experience): Board-approved minimum is \$115,000/year. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.
- iv. **Scientific Postdoc** (< than 5 years' experience): Board-approved minimum is \$75,000/yr. Compare the individual's actual CCAT charged salary + benefits costs to the Board-approved minimum calculated for the same time period. Report the higher value.
- <u>d. Staff Salaries</u>. Report actual salary and benefits costs. There is no Board-approved minimum for staff salaries. Do not include indirect costs or overhead.
- 2. <u>Equipment \$5,000 or more per item (Capital Equipment)</u>. Report actual expenses (paid invoice price). Also report costs associated with a fabricated item that has a value greater than \$5,000 when the entire assembly or component is completed.
- 3. <u>Travel.</u> Report travel costs incurred to further project goals. This may include travel by academic staff. However, the travel must be directly related to the CCAT program. General attendance at an American Astronomical Society (AAS) meeting or similar event should not be submitted unless approved by the Board. For the purposes of reporting, Domestic Travel is considered travel that occurred within the United States to include Alaska and Hawaii, Canada, Mexico, and the Commonwealth of Puerto Rico. All other travel should be reported as Foreign Travel.
- 4. <u>Materials and Supplies</u>. Materials and supplies (M&S) purchased to further CCAT Project goals may be submitted. Record actual invoice costs to include any shipping and insurance that was paid as part of the procurement.
- 5. **Publications.** Publication costs to include graphics and page-setting charges may be submitted. To qualify, the publication must be related to the design of the Fred Young Submillimeter Telescope, the telescope's supporting infrastructure, or science that might be performed on one of CCAT's instruments.

- 6. <u>Consulting Agreements.</u> Costs of consulting agreements that further the goals of the CCAT Project may be submitted. Management fees and other costs charged by the <u>consulting organization</u> may be included.
- 7. Computing. The cost of computer equipment and services, including computer-based retrieval of scientific, technical and educational information, may be claimed. General purpose computing equipment (laptops for word processing, spreadsheets, e-mail, etc.) should not generally be submitted unless previously approved by the Board. NOTE: If the cost of an individual computer is \$5,000 or above, please record the expense under "Equipment > \$5,000 per item."
- 8. <u>Sub awards</u>. Costs of sub awards that further the goals of the CCAT Project may be submitted. Management fees and indirect costs charged by the sub award <u>recipient</u> may be included.
- 9. Shipping and Communications. Shipping costs and communications charges incurred to conduct or manage work related to the CCAT Project or its goals may be claimed. NOTE: shipping charges associated with the purchase of equipment or M&S should be listed under that category and not here. Posters, brochures, and similar items for display at symposia such as the semi-annual AAS meeting may be claimed for credit as long as they were directly related to CCAT Project goals. Mobile phone and related data charges, however, should not be submitted unless a clear connection to the CCAT Project can be documented. One example of an allowable communications charge would be teleconference charges related to holding a CCAT technical exchange.
- 10. Other. Any costs claimed by a Member that do not properly fit into the other categories may also be submitted as long as it is directly related to the goals of the CCAT Project. A description of the cost as well as information the submitter believes the Board needs to have in order to approve the amount should be entered in the notes section of the template or on a separate sheet. In addition, payments made by Members to CCAT Observatory, Inc. as part of the Corporation's Operating Budget should be reported as "Other" under WBS 9. List the CCAT Invoice number in the notes.
- 11. <u>Indirect Costs (IDC)</u>. Member institution IDC or institutional overhead costs from all categories listed above should be recorded on this line. However, unless otherwise approved by the Board, this figure is <u>not</u> used for Total Financial Contribution credit. NOTE: The charging rate for IDC and, if appropriate, the source of funds should be described in the notes. This requirement does not apply to IDC or overhead charged to the Partner institution by external vendors. For example, if a Member issued a sub award to a third party and that third party charges authorized IDC, the Member institution should include and report that cost as part of the sub award as that cost was paid by the Member to an outside organization.

1.24 APPROVAL AND DECISION PROMULGATION PROCESS

Submitting organizations must be prepared to submit reasonable documentation that substantiates the amounts submitted in their claims. The Business Manager reviews all submissions for completeness and works with the submitter to answer questions or obtain needed documentation. In cases where the desired level of documentation is not obtainable, the Business Manager may require a certification from the submitter attesting to the accuracy of the submitted data.

Once the claim package is complete, the Business Manager forwards the claim with all supporting documentation to the Board. The Corporate Secretary or Business Manager provides a copy of the Board's decision to the applicable organization and to the accountant.

PROCUREMENT

Procurement activities accomplished on behalf of the Corporation must be compliant with applicable laws and regulations, all applicable CCAT Corporation documents and policies, and be for an approved business purpose.

1.25 COMPETITIVE PROCUREMENT

All procurement transactions are conducted in a manner to provide, to the maximum extent practical, open and free competition. All purchase contracts, other than professional services, involving an expenditure of more than \$10,000 are awarded to the lowest responsible bidder who is most advantageous as to price, quality and other factors considered to be particularly relevant to the needs of CCAT.

In general, a minimum of three bids are solicited. An opportunity to bid is a valid solicitation even if the vendor does not supply a bid, or supplies a bid that is not fully compliant with the solicitation documents.

If only one supplier can provide the technology, product and/or service required for the performance of a contract, a sole source justification must be documented and forwarded to the contract approving authority with a vendor selection memorandum. If, however, a funding source has already approved the selection of a specific contractor, it is not necessary to follow competitive bidding procedures or to provide sole source justification. In addition, given the very specialized design and fabrication requirements of the Fred Young Submillimeter Telescope, the CCAT Project may, at its option, limit competition to vendors that are known to be able to accomplish the required work. This could also apply to situations where a company was selected to design a component of the telescope and is subsequently in a unique position to accomplish the follow-on manufacturing. In such cases, that decision is disclosed in the vendor selection memorandum, or in the sole source justification.

Some form of cost or price analysis is made and documented in the procurement files in connection with every procurement action over \$10,000. Price analysis may be accomplished in various ways, including the comparison of price quotations submitted, market prices and similar indicia, together with discounts. Cost analysis is the review and evaluation of each element of cost to determine reasonableness, allocability, if applicable, and allowability.

Variations, or exceptions to this policy, are allowable at the discussion of the Project Manager, but must be fully disclosed to the contract approving authority.

1.26 FORM OF SOLICITATION

Solicitations for goods and services provide for the following:

- 1. A clear and accurate description of the technical requirements for the material, product or service to be procured.
- 2. Requirements that the bidder/offeror must fulfill and all other factors to be used in evaluating bids or proposals.
- 3. A description, whenever practicable, of technical requirements in terms of functions to be performed or performance required, including the range of acceptable characteristics or minimum acceptable standards.
- 4. The specific features of "brand name or equal" descriptions that bidders are required to meet when such items are included in the solicitation.

1.27 PROCUREMENT CONTRACT

The Project Office recommends to the Board the type of procurement contract (e.g., fixed price contracts, cost reimbursable contracts, purchase orders, and incentive contracts) that is most appropriate for the particular procurement and for promoting the best interest of the program or project involved.

Procurement contracts will contain any flow-through provisions required by funding sources.

1.28 CONTRACTOR QUALIFICATIONS

Contracts are made only with responsible contractors who demonstrate the ability to perform successfully under the terms and conditions of the proposed procurement. Consideration is given to such matters as contractor integrity, record of past performance, financial and technical resources or accessibility to other necessary resources. Contracts are not made with a debarred or suspended party.

1.29 LEASE/PURCHASE

Where appropriate, an analysis is made of lease and purchase alternatives to determine which would be the most economical and practical procurement. A lease/purchase procured under a grant may require prior approval of the funding source.

1.30 CONTRACT ADMINISTRATION

The Project Office ensures contractor conformance with the terms, conditions and specifications of the contract and ensures adequate and timely follow up of all purchases. The Project Manager evaluates contractor performance and documents, as appropriate, whether contractors have met the terms, conditions and specifications of the contract. The Project Manager may delegate this responsibility on a contract-by-contract basis to individuals who have the required expertise.

The Business Manager reviews and approves applications for payments submitted by contractors after confirming satisfactory performance of contractual terms and conditions with the Project Manager or his/her designee as specified above.

RISK MANAGEMENT

Risk management includes all policies and practices designed to reduce or eliminate losses experienced by the Corporation. These losses arise from injury or damage to property and include legal liability imposed upon the Corporation when the injury or damage has occurred on Corporation property or been caused, at least in part, by the Corporation or its agents.

Risk management includes an ongoing process to:

- 1. Identify risks;
- 2. Evaluate risk potential;
- 3. Select the best risk management techniques to mitigate or manage the risks without unduly curtailing or modifying activities necessary to the CCAT mission; and
- 4. Monitor and evaluate the results.

Under the CCAT - Cornell Services Agreement, Cornell University's Office of Risk Management provides risk management advice to CCAT Observatory, Inc. The Cornell Risk Manager brings to the attention of the Project Office any situations and risk mitigation strategies that they believe the Corporation should be

made aware of and helps the Project Office devise and implement corporate risk management strategies and other related activities.

Risk management for operations in Chile is supported the University of Cologne under the UzK Services Agreement since the University of Cologne acts as the Corporations legal entity in Chile.

All members of the CCAT community are required to inform the Project Office as soon as possible of any potentially unsafe or otherwise hazardous situation involving the CCAT Project.

If the individual is uncertain if the situation is or may become hazardous, it should be reported to the Project Office. Once a notification is received, the Project Office coordinates with the Cornell Risk Managers to determine next steps. If the hazardous, or potentially hazardous, situation is present at a Member organization, that organization should also be notified. If the situation is present at a CCAT location in Chile, appropriate staff at the University of Cologne must also be notified.

APPENDIX A - STANDARDIZED FINANCIAL REPORTING FORMAT

Unless specified differently in the tasking document, Member organizations and CATC submit CCAT Project financial information using the following format. This format may be tailored to specific project activities but retain the general outline and detail represented here.

See P-MIDC-STD-0004 for the latest version of the Work Breakout Structure.

NOTE: Although this format reflects U.S. Dollars, Members located outside of the United States should submit their costs in the appropriate Foreign Currency.

						MIDE F 4	C 130M	C 1 30711	A TOUR	A LOCK				
ORG ANZ ATION NA ME	Reporting Period:	WBS1	WBS2	WBS 3	WBS 4	Instrument	Instrument	Instrument	Instrument	Instrument	WBS 6	WBS 7	WBS8	WBS 9
	List Period	(Land/Concession)	(Land/Concession) (KeyInfrastructure) (Summit Facilities)	(Summit Facilities)	(Telescope)	(Prime-Cam)	(Prime-Spec)	(P-CMB Stage IV)	(CHAI-Heterodyne)	(Common)	(Science)	(Mgt & Integration)	(Data & Control)	(Operations)
CATEGORY														
 APP ROVED ACADEMIC SALARIES ** (describe in notes) 														
a2. LEAD ENGINEER (see instructions)	\$0.00													
ad . DR ENGINEER (see instructions)	80.00													
a5. LEAD SCIENTIST (see in structions)	\$0.00													
a6. SR SCIENTIST (see instructions)	\$0.00													
a7. JR SCIENTIST (see instructions)	\$0.00													
a8. SCIENTIFIC POSTDOC (see instructions)	\$0.00													
 ALL OTH ER STAFF (actual salaries incl benefits) 	\$0.00													
SUBTOTAL	\$0.00	\$0.00	00'0\$	00'0\$	\$0.00	\$0.00	\$0.00	00.0\$	\$0.00	\$0.00	00.0\$	\$0.00	00'0\$	\$0.00
b. EQUIPMENT(>\$5 k per item)	20.00													
C1 DOMARCTIC TRAVEL	\$0.00													
C2. FOREIGN TRAVEL	\$0.00													
SUBTOTAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
d. MATERIALS & SUPPLIES	\$0.00													
e. PUBLICATIONS	\$0.00													
f. CONSULTING	\$0.00													
g. COMPUTING	\$0.00													
h. SUB AWARDS	\$0.00													
I. SHIPPING & COMMUNICATIONS	\$0.00													
 OTH ER** (describe in notes) 	\$0.00													
SUBTOTAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
k. INDIRECT COSTS	\$0.00													
	1									4			*	4
TOTAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Calculated Field - please do not change														
SUBCATEGORY	NOTES:													
a1. ACADEMIC SALARIES:														
a2. LEAD ENGINEER														
a3. SR ENGINEER														
a4. JR ENGINEER														
a5. LEAD SCIENTIST														
a6. SR SCIENTIST														
a7. JR SCIENTIST														
a8. SCIENTIFIC POSTDOC														
a9. ALL OTH ER STAFF														
b. EQUIPMENT(>\$5k peritem)														
c1. DOMESTIC TRAVEL														
c2. FOR EIGN TRAVEL														
d. MATERIALS & SUPPLIES														
e. PUBLICATIONS														
f. CONSULTING														
g. COMPO IING														
II. 30B AWARD3														
I. SHIPPING & COMMONICATIONS I. OTHER														
k INDIRECT COSTS														