

**ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN
ASTRONOMY
(AURA)**

**CORPORATE OFFICE AND CENTRAL
ADMINISTRATIVE SERVICES
Fiscal and Accounting Processes and
Procedures for NSF Funded Centers**

Revised August 2016

Revisions Log

February 10, 2016 – remove Finance Manager from section II, B; Ordering Cash
February 10, 2016 – Add bullet on posting cash order in section II, B
February 10, 2016 – Change wording on Travel Expense policy regarding Center policies; section III, number 13
February 11, 2016 – Add Cash order calculation explanation to section II.
February 11, 2016 – reference step by step cash projection instructions in section II.
May 10, 2016 – Add Senior Financial Analyst to Cash Management and Certification Process section II, B.
June 16, 2016 – Change name from Policies to Processes. Several minor edits and corrections.
June 16, 2016 – Incorporate the FastLane permission process and associated monitoring assignments.
June 16, 2016 – Incorporate NSF Program Income reporting process
August 2, 2016 – Add processes for calculating Program Income for NSF reporting

The Association of Universities for Research in Astronomy (AURA) is a consortium of universities and non-profit institutions committed to advancing the frontiers of astronomy. AURA manages world-class astronomical facilities on behalf of the NSF and NASA that operate as public observatories and are open to astronomers on a merit basis.

The AURA Corporate Office is based in Washington, D.C. The Corporate Office provides management oversight and sets policies for the astronomical facilities. The AURA Corporate Office is governed by the AURA Board of Directors.

AURA Central Administrative Services ("CAS") is a division of Association of Universities for Research in Astronomy ("AURA"). Business services provided by CAS include; Procurement, which comprises Contracts, Purchasing, Shipping, Export, Property Management and Sponsored Projects & Grants; Accounting, which comprises Financial Reporting, Accounts Payable, Accounts Receivable and Payroll; and, Business Information Technology ("IT").

CAS Accounting is centralized in Tucson, AZ with a support element located in Chile to provide local accounting and reporting services. Accounting functional activity in Chile is in Chilean Peso's. Peso transactions occurring in Chile are transferred and converted to the US\$ accounting system in Tucson. The accounting function is managed by the CAS Controller who reports directly to the CAS Senior Manager.

I. GENERAL INFORMATION

The processes and procedures presented herein pertain specifically to the AURA Corporate and CAS operations. It is AURA policy that operating units may develop processes and procedures specifically applicable to their unit, but these processes and procedures may not conflict with AURA policy.

A. The Basis for AURA Accounting Records

As a U.S. based non-profit organization, AURA follows the accounting principles generally accepted in the U.S. In addition, as a government contractor and Federally Funded Research and Development Center (FFRDC), AURA is subject to the Uniform Guidance at 2 CFR 200.

B. Authority and Responsibility

The President is responsible for assets and services provided to and generated by the organization at the explicit direction of the AURA Board of Directors. The President is the custodian of all funds and has the authority to administer these funds, based on direction from the AURA Board of Directors in a manner consistent with AURA policy as well as the terms and conditions of AURA contracts and cooperative agreements with Federal Agencies. At his or her discretion, the AURA President may delegate some or all of these responsibilities to members of the corporate office staff.

C. Financial and Internal Control Systems

Internal control is a fundamental component of financial management. Its purpose is to assure that:

- Financial resources are used in accordance with applicable laws, regulations, and policies.
- Financial resources are safeguarded against waste, loss and misuse.
- Reliable data on the use of financial resources is properly obtained, recorded and reported.

Procedures must be established to provide for:

- Proper authorization of transactions and activities.
- Segregation of duties where possible and appropriate, to reduce the opportunity for any one individual to both perpetrate and conceal errors or irregularities in their normal course of duties.
- Limiting authority over access to assets.
- Maintaining adequate documentation of transactions, insuring adequacy is defined and implemented including controls, timing, and access.
- Performing independent routine verification, comparisons and reconciliation of transactions and their valuations.

D. Financial Statements

Preparing financial statements and communicating key financial information is a necessary accounting function. Statements are management tools used in making decisions, in monitoring the success of financial objectives, and as a standard method for providing information to interested parties external to the organization.

It is AURA policy to prepare accurate financial statements and distribute them on a timely basis in the most cost effective manner in order to match expenses and income appropriately.

On an annual basis, financial statements shall be audited by an Independent Auditor retained by the Board of Directors.

AURA Corporate Financial statements are presented at each meeting of the Board of Directors. Statements are reviewed by the Treasurer and presented to the Board of Directors for acceptance.

CAS Business IT provides customized computer software which supports both the Procurement functions and the financial reporting function for all of its NSF funded centers as well as for AURA Corporate.

CASNET is an on-line reporting system that delivers up-to-date financial information to Center and Corporate management. CASNET accesses financial data from the official accounting system software Public Sector's USL Financials, a fund based accounting system developed for Government and not-for-profit organizations. All types of financial and labor information are available in formatted reports, with many supporting drill-down capability to go from summarized data to the supporting detail. Data can also be exported into spreadsheet, database and word processing applications. CASNET was developed in-house and is used by all AURA NSF funded Centers.

Reqless is a web application for processing purchase requisitions, travel requests, and shipping memos. Upon submittal of requests, REQLESS manages the approval process through the account management (signature authority) and supervisory hierarchy.

Approved requests are transferred into the USL PO module. REQLESS was developed in-house and is used by all AURA's NSF funded Centers.

Carina is a web application that tracks and links basic information, key documents, and user notes for all agreements, Cooperative Support Agreements ("CSA"), grants, contracts, and sub-awards managed by CAS. Carina allows users to quickly look up and share information regarding agreements. Carina also has a module that automates the process of obtaining and documenting the required approvals for invoices submitted to AURA under contracts and sub-awards.

Webud is a high level budgeting application that allows management to input their annual forecast of workforce and spending by account and cost center (work breakdown). The final budget becomes the basis for the Annual Program Plan submitted to NSF. Webud was developed in-house by CAS for NOAO and is also used by NSO.

Budman is a web based application that allows managers to track their current fiscal budget and request changes. The system also tracks employee payroll expense, forecasts projected payroll costs, and compares the results to the budget. Budman was developed in-house by CAS and is used by NOAO and NSO.

E. Budgeting

Budgeting is an integral part of any organization as it represents the translation of organizational goals and objectives into financial and human resource terms. Although accounting and budgeting both relate to sources and uses of funds, accounting is primarily concerned with the current and past fiscal events while budgeting is concerned primarily with the future.

A budget should be designed and prepared to direct the most efficient and prudent use of the organization's financial and human resources.

The AURA Corporate Office budget is developed annually for the upcoming fiscal year. The budget is drafted by the Vice President for Administration and approved by the President and the Board of Directors prior to the commencement of the fiscal year. Once the budget is approved, the Vice President for Administration will implement the budget plan. Monthly reports comparing actual results to the budget shall be prepared by the CAS Controller reviewed by the Vice President for Administration and submitted to the President for review.

The CAS\HR budget is developed annually for the upcoming fiscal year. The budget is drafted by the CAS Senior Manager and approved by the Administrative Oversight Committee.

Each of the NSF funded Centers is responsible for developing annual budgets that then become the basis for their Annual Program Plan submitted to NSF.

II. CASH MANAGEMENT AND CORPORATE INVESTMENT GUIDELINES

AURA's Financial policy sets the guidelines to be followed for investment of corporate cash reserves. This policy intentionally reflects a conservative strategy which sacrifices some potential earnings for security of the capital invested and which places some premium on liquidity to meet emergencies. There are two general classes of funds to be invested: operating funds and reserves.

A. Operating Funds – Corporate Office

Operating funds are used for ongoing operations of the Corporate Office to meet payroll, travel expenses, etc. Except for immediate cash needs, these funds should be kept in US treasury money-market accounts and transferred to the corporate checking accounts as needed. Facility & Administrative (F&A) corporate cost reimbursements and Management Fee payments are to be transferred into the US Treasury money-market accounts as excess cash is accumulated.

The minimum level for Operating Funds should be sufficient to fund one full board meeting at a U.S. site, plus funds for one month's Corporate operations.

B. Operating Funds – NSF Centers

Operating funds are the funds used for ongoing operations of the NSF funded Centers to meet payroll, operating expenses, travel expenses, etc. CAS has one operating account from which all transactions flow through.

A 'Cash Projection' spreadsheet is maintained as a tool in planning for cash orders for payroll and orders for cash are, generally, placed twice a week on Tuesday and Friday. The lead-time for the cash order to arrive at the bank is usually two working days.

1. Cash Projection

The Cash Projection is used as a planning tool designed to estimate cash needs in the following areas (step by step instructions are outlined on the Cash Projection spreadsheet):

- Cash is ordered for Accounts Payable on a reimbursement basis. Invoices are entered and expensed as they are received and due. Each Tuesday we process the Voucher Selection list which selects all expenses posted and due. We add in any wire or ACH payments in excess of \$25,000 that are not entered into the system right away. Cash is ordered based on this selection. Cash is received on Thursday and AP processes checks for all expenses posted through that date.
- Payroll cash disbursements. AURA NSF Centers pays its employees on a bi-weekly basis (on Friday). The net cash disbursements for a normal payroll cycle include wages for all NSF funded centers and the associated taxes and retirement contributions. Funds for payroll disbursements are ordered the Friday preceding a normal payday (generally available in our bank account in two business days) and completely disbursed by the Friday pay date. The bank requires the cash to be in the operating account on the day the Payroll ACH batch is uploaded. The ACH batch is uploaded on Tuesday (no later than Wednesday) prior to the Friday pay date.
- Chilean cash needs are sent to Tucson each Thursday to be included in the Friday cash draw. An Accountant in the Chile Accounting office submits a Cash Projection based on the AP invoices posted for payment in the following week and the cash required to cover the Chilean Payroll. The funds are wired to Chile as soon as they are received. Chile Purchases Peso's and processes payments on Tuesday or Wednesday.
- On occasion there are circumstances that require us to project cash needs for a

longer period than 2 to 3 business days, e.g. at the end of the fiscal year NSF shuts down the ACM\$ system in the last week of September requiring us to project and order enough cash to cover this extended period of time. For these occasions the following steps are followed:

- The same cash projection process outlined above for Payroll and Chile cash needs is extended through the period of time that the ACM\$ system is shut down. In addition to these processes all Contracts Officers are asked to forecast any large contract payments that will be due in that shutdown period. We calculate all regular accounts payable cash needs based on the average daily expenditure of expenses less than \$25,000.
- Chile projects their cash needs through the projected ACM\$ shut down period taking into account their average Accounts Payable per day; any payroll occurring in that period; and any large contract payments that will be coming due.

Ordering Cash

Cash is ordered from NSF using the ACM\$ system located at <https://www.research.gov/research-portal/appmanager/base/>. The Controller, Senior Financial Analyst and CAS Senior Manager have access and authority to order cash. The Controller routinely handles the task. The following process is used when ordering cash:

- The person ordering cash will log in to Research.gov and enter the ACM\$ Dashboard to download the Excel spreadsheet with the most current amounts.
- Once the spreadsheet is saved to a specific location on the CAS Server the ACM\$ form (shown below) will be completed based on the Cash Projection for Chilean Cash and if cash is needed for PR. Cash required for AP is based on total expenses expensed with a payment due date of the following Wednesday.

This process has been reviewed and approved by the NSF BSR team in February of 2016

What's New?
Create ACM\$ Cash Request

ACM\$ Cash Request for 2/11/2016

Total Order:

Includes Fixed Amounts For:

Gemini:

LSST:

DKIST:

NOAO:

NSO:

Submit

- When the Submit button is hit a macro will use the spreadsheet that was downloaded above and distribute the cash order to the awards based on actual expenses posted first with any cash in excess of posted expenses needed for Chile or PR being allocated based on a predetermined allocation rate calculated based on historical payroll costs. Chilean cash is allocated between the NOAO and Gemini O&M awards. [Appendix H](#) provides a detail explanation on how the Macro allocates the cash ordered to each award.
- The person ordering cash will log in to Research.gov and enter the ACM\$ Dashboard to upload the Excel spreadsheet now saved with the Cash order per award. If there are any large adjustments for any reason they are noted in the comments section of the cash order. The person ordering the cash will then forward the ACM\$ cash request to the Senior CAS Manger or the Senior Financial Analyst for Certification.
- A CAS Accountant will post the transaction in the accounting software.

[Appendix A](#) provides a flow chart showing the process of recording amendments to the cooperative agreements to receivable accounts; drawing cash; and, crediting the appropriate receivable account.

C. Reserves – Corporate Office

Reserves are funds accumulated beyond those needed for immediate expenditure:

A. First Level Reserves

First level reserve funds are available to augment the operating funds during any operating year. The first-level reserves should meet the full corporate budget for approximately twelve (12) months at the current-year budgeted level. This requirement can be met by a combination of short-term investments and/or a standby Line of Credit, guaranteed by reserve funds. When possible, investments shall be made in increments not exceeding federally insured amounts for certificates of deposit with maturity dates scheduled to provide required liquidity during the fiscal year. Short-term Treasuries should be similarly staggered.

B. Second Level Reserves

Second level reserve funds are available for investment periods longer than one year. In order to maximize interest earnings, these funds should be invested in increments up to federally insured amounts for certificates of deposit with staggered maturity dates.

D. Investment Instruments

Investments of First Level Reserves may be made in U.S. Government instruments; in Certificates of Deposit or other instruments insured by the FDIC; Commercial paper backed by bank letters of credit; high quality bankers' acceptances; or repurchase agreements issued by reputable financial institutions.

Investment decisions should have preservation of capital as the first priority and portfolio liquidity must come before yield considerations. Even though certificates of deposit are

insured, care should be taken in such investments because in case of failure, these funds are temporarily non-liquid; and,

Investments of Second Level Reserves may be made in the same instruments as prescribed for First Level Reserves. In addition Second Level Reserves may be invested in U. S. Government guaranteed bonds, investment grade corporate bonds or Mutual Funds of over \$500 million in assets that invest in U.S. Government guaranteed bonds, investment grade corporate bonds and equities.

Equities may not exceed 50% of the Second Level Reserves and Corporate bonds may not exceed 25% of the Second Level Reserves.

III. NSF FastLane Permissions

AURA CAS assigns FastLane permissions based on the individual job descriptions and needs of the employee. Administrative rights are given to the CAS Procurement Manager; the CAS Grants Officer; and, the AURA Corporate Office Business and Administrative Manager. Administrators give permissions to; Prepare & Submit Proposals; Review Proposals; Submit project reports, notifications & requests; and, Manage Financials, which includes ordering cash through ACM\$. Individual authorized to Manage Financials are the: Controller, CAS Senior Manager, Senior Financial Analyst and Financial Manager.

IV. Program Income Report

Program Income is gross income earned that is directly generated by a supported activity or as a result of the grant during the period of performance. Examples of Program Income earned by AURA managed NSF funded Centers include; Indirect expense reimbursements through the NSF approved recharge rates charged to non-NSF funding sources; Sales from NOAO Kitt Peak or NSO Sacramento Peak Gift Shop; and miscellaneous other sources that vary depending on the Center they are earned in.

On an annual basis, grantee organizations are required to submit a Program Income Reporting Worksheet to NSF in order to report program income earned/expended for any of their awards during the previous twelve months or to validate that they did not earn/expend program income for any of their awards during the applicable period. This report is submitted by the CAS Controller.

The process for calculating the program income generated under each CA is completed by the Financial Manager through an Access Query on the AURA CAS USL accounting software using the TRXFIL table. This query pulls all amounts under specific expense\object codes as follows:

Exclude:

- o Outside Fund Y, V and Z accounts with expense code 999 (these revenues offset A/R expense)
- o Gemini fund G accounts with expense code 07G (Gemini does not use labor recharge for income)

• Include:

- o Accounts where three character expense code starts with: 07? or 9?? (net income from labor recharge activity, indirect rates, and other receipts like meals & lodging, rent, museum sales)
- o Where NOAO fund N expense code in: 505, 755, 780 (net NOAO South internal income from shuttle and facilities support)

Based on the account number used we can then sort the income applied to each NSF award.

V. ACCOUNTING PROCEDURES

The U.S. Government has established standards for non-profit organizations which are in receipt of government funds. These standards pertain to administration of grants and agreements, cost accounting and audits, and are set forth in the Uniform Guidance at 2 CFR 200.

AURA must strictly adhere to these standards. Of particular concern are the fiscal responsibilities with respect to the following accounting procedures:

- Accurate, current and complete disclosure of the financial results of each federally-sponsored project or program.
- Records that adequately identify the source and application of funds.
- Effective control over and accountability for all funds, property and other assets.
- Comparison of outlays with budgeted amounts for each award.
- Written procedures for determining the reasonableness, allocability and allowability of costs.
- Accounting records supported by source documentation.

AURA CAS has an Accounting Procedures book that documents the step by step procedures followed for every task assigned to each Accounts Payable, Payroll and Accounting staff member.

1. Signatory Authority

Signatory Authority is set up and managed through the Reqless software and the CAS Procurement Policy. Each Center Director delegates authority to specific managers that oversee specific accounts and the budgeted funds within those accounts. The managers can then delegate authority downward to supervisors or employees that oversee specific projects or area of operations. Through Reqless a Delegation Proposal can be submitted for a specific dollar amount and a specific account or series of accounts. This Proposal must be approved by the manager who has signature authority over the account(s) as well as the dollar amount being proposed. Once approval has been received the Procurement Manager or IT Programmer enter the employee name, account number(s) and dollar limits into the Signature Authority table in Reqless.

2. Cash Disbursements

The primary objective for accounts payable and cash disbursements is to ensure that disbursements are properly authorized; invoices are processed in a timely manner; and vendor credit terms and operating cash are managed for maximum benefit.

Internal control over disbursements is achieved through various methods; 1) the use of Reqless for authorization of purchases; 2) Buyers who create Purchase Orders ("PO") and enter vendors; 3) Logistics, who receive any physical purchases; 4) Accounts Payable staff who process invoices and match them to receivers and PO's as they are received; 5) Payroll staff, who print the checks; and, 6) Accountants who do the reconciliations to general ledger accounts. It is CAS's goal to segregate duties to the greatest possible extent.

- a) CAS processes invoices for payment once a week. Information is entered into the financial accounting system from approved invoices with all appropriate documentation attached. Disbursements are reviewed for accuracy by the Senior Accounting Specialist ("SAS").

[Appendix B](#) provides a flow chart which outlines the Accounts Payable procedures.

- b) Travel Expense Reimbursements (“TER”) are processed by the Travel (“TR”) Accounting Specialists who are trained to review using the AURA Corp. Travel Expense Reimbursement Policy. TER’s are reviewed not only by the authorized signer but also by; the department administrative assistants; TR Accounting Specialist; and, Accounting Specialist for any unallowable expenses that may be included in the report.

[Appendix C](#) outlines procedures for processing TER’s

Occasionally an invoice is received at various Center locations for which the procurement was not processed through the Reqless system. A requisition must be created and the invoice attached in Reqless to ensure proper authorization prior to payment. For small employee out of pocket costs a “Employee Reimbursement” request can be entered in Reqless for which proper authorization can then be received. The employee may not self-approve a reimbursement to themselves. These should not exceed \$100 and should be very rarely used.

3. Accounts Receivable

AURA CAS has one Accountant that oversees all outside funding sources to ensure these expenses are recorded accurately and billed out timely. All grants and awards can be viewed and audited through Carina. Non-NSF funding sources are tracked through the chart of accounts using letters; Z, for NOAO; V, for Gemini; X, for LSST; and, Y for NSO. These accounts are reviewed regularly to ensure reimbursements are received as quickly as possible.

[Appendix D](#) outlines the process for tracking and invoicing non-NSF funding sources.

4. Non-NSF Cash Receipts

Cash is the most liquid asset an organization has and therefore, internal controls must be in place. However, it remains critical to ensure that all cash receipts are immediately deposited and identified and recorded properly.

[Appendix E](#) presents a flow chart illustrating the cash receipts process.

5. Recording of Voided Checks

A void check should be processed as follows:

- Write “VOID” clearly across the face of the check. This should also be done on the remittance advice of the check that is attached to the filed voucher package.
- The organization’s remittance advice of the replacement check, if required, is attached to the existing voucher package, the old check information is crossed out and initialed by the accountant, and the new check information is inserted.

6. Bank Reconciliations

All bank accounts should be reconciled on a monthly basis and reviewed and approved by the Controller or Senior Financial Analyst.

The procedure for stale checks - checks outstanding for more than six months – is as follows:

The Accountant will write a letter giving check recipient thirty (30) days to respond and/or cash check. If no response is received within thirty (30) days, the check will be voided. If the check was written to a vendor residing within the state of Arizona the Balance Sheet account for Unclaimed Properties will be charged.

An Unclaimed Property report is filed annually with the state of Arizona. Any property that has been unclaimed for the specified number of years will be submitted to the State of Arizona.

The reconciliations will be completed by the 20th day of the following month. The Controller or Senior Financial Analyst reviews all reconciliations after completed and compares them to the GL balances.

7. Petty Cash

There are several Petty Cash accounts at various Center locations each with an assigned petty cash custodian. Funds are maintained for authorized minor expenditures, typically equal to or less than \$50.00. A record of receipts must be maintained and submitted for reimbursement to the Petty Cash fund periodically depending on the level of usage.

8. Payroll

The processing of payroll involves a series of tasks necessary to ensure that employees are properly compensated and that the applicable federal and state withholdings are deducted from gross wages. Additionally, detailed records must be maintained to support tax deposits required for the aforementioned withholding.

Payroll and labor reporting for NOAO, NSO, Gemini and LSST is done through a Web based timesheet program (WTS) and Ultipro Payroll and HR Software. Each employee has a “Home” account in which all payroll and benefit costs associated with them are budgeted for and charged to each pay period. For NOAO, NSO, LSST and AURA CASHR employees a “Fringe Benefit Rate” which includes all employees’ benefits related costs, (i.e. healthcare premiums, FICA, workers compensation, employer contributions to retirement, etc.) are applied to each employees gross pay. The combined cost of each employees wage and benefits is charged to their home account on a bi-weekly basis after each payday. Benefits for Gemini employees are charged directly to their Home accounts.

[Appendix F](#) is a flow chart outlines the processes for Time and Effort Reporting through Web Time Sheets (“WTS”).

In the week following each payday each employee must submit their completed timesheet for approval, (this is all done electronically via the WTS program). Once all timesheets have been submitted and approved the Job Costing process is done for NOAO, NSO, and LSST employees, which “charges” out any hours the employee charged on their time sheet to accounts other than their Home account and credits their home account for these hours. The re-charge process calculates the cost of the hours charged out by utilizing a “Labor Recharge Rate” which includes the Fringe

Benefit Rate as well as the costs associated with holidays, vacation and sick leave, and any other leave time as allowed by AURA policy.

[Appendix G](#) outlines the Job Costing procedures.

9. Chilean Data processing

- a) CAS Accounting in Chile processes all Chilean Peso accounting transactions through the Peso version of USL. Cash flow and accounting procedures for the Chilean Peso are outlined below.
 - Each Thursday CAS South will send a Cash Projection for the following week.
 - CAS North will add this amount into the NSF draw each Friday.
 - Funds will be wired to the CAS South Dollar account on the following Monday or Tuesday.
 - CAS South will purchase Peso's as needed to pay AP and Payroll transactions. Documentation on Peso purchases will be emailed to CAS North.
 - Each Monday CAS South will send a data feed for the previous weeks transactions. The data feed will include all GL (BS and IS accounts) entries that were processed in the specified time period. The data should be formatted and ready to be imported into the USL\$ accounting system in the North. The peso rate used will be from the previous weeks purchase. No transactions processed in US\$ will be included in these batches.
 - Accounting in Tucson will import the transactions with US\$ values.
- b) US\$ transactions are processed through a separate USL accounting system that is set up for Chilean transactions processed in US\$. These transactions are sent to Tucson at the end of each month in a separate data feed to be imported at actual value.
- c) Travel Requisitions ("TR") submitted in Chilean Pesos are imported and managed by an Accountant on the Chilean Accounting staff. Procedures for processing Chilean TER's are the same as those processed in US\$ in Tucson. If a TR for a Chilean based employee is submitted in US\$ the following procedures will be followed:
 - Travel Requisitions ("TR") submitted in US\$ will be imported (by the Senior Accounting Specialist handling Travel) into the USL US\$ accounting system in the North.
 - Any TR's advances will be emailed to AccountingCH@aura-astronomy.org for processing.
 - When the Travel Expense Reports ("TER") are submitted for these TR's they can be processed in the South using the US\$ accounting system or be reimbursed through Payroll. **For all US\$ Advances and TER's**

processed in the South a “Special Schedule” will need to be submitted to AccountingUS@aura-astronomy.org so that these \$ Transactions can be entered into the USL US\$ accounting system in the North and the TR’s can be closed.

10. Revenue Recognition

- a) Management Fees and F&A receipts - The preponderance of AURA revenue comes from F&A and Management fee income received from AURA centers. These funds shall be recognized as revenue when they are earned.
- b) Membership Dues are recognized in the year in which they are received and/or designated by the prospective member. If dues are received in advance, they are treated as a liability and reflected in the financial records as deferred dues income.
- c) Grant and contract revenues are earned when expenses are incurred and recorded against specific cost objectives of funded tasks, thus fulfilling the restriction(s) on such funds.
- d) Other Income received from gain on sale of assets and rental of corporate owned assets is recognized as revenue in the period payment is earned. Investment and interest income is recognized when earned. As investments are held on the corporate records at their fair market value, unrealized gain or loss on these investments are recorded as net investment income (loss).

11. Expenses

a) Allowable Costs

AURA accounting and procurement staff is required to maintain expertise in the cost principles set forth in Uniform Guidance at 2 CFR 200 including its revisions or superseding documents. Each expenditure must be analyzed with respect to the principles of allowability, reasonableness and allocability. To the extent that all or any part of an expenditure fails to meet these standards, it must be separately identified as unallowable and recorded as such.

As a recipient of government funds, AURA is subject to audit by federal agencies in addition to its outside independent auditors. It is the responsibility of the AURA CAS to ensure that full disclosure and cooperation is demonstrated during the conduct of these audits.

AURA CAS strives to maintain efficient business practices and good cost control. A well managed accounts payable function can assist in accomplishing this goal from the purchasing decision through payment and check reconciliation.

Careful Attention should be given to how expenses are coded and recorded in the accounting system. Each expense item should be analyzed with respect to Uniform Guidance at 2 CFR 200 for allowability, reasonableness, and allocability. Expenses which fall outside these criteria should be separately identified as unallowable costs.

In addition, for AURA Corporate, allowable costs must be identified as pertaining to all centers, or to a specific center. This designation is important for the AURA Corporate indirect rate proposal.

b) Allocation of Corporate Costs

Allowable Corporate Costs are used to determine the indirect rate (F&A) assigned to each operating center. Careful attention is required to ensure that these allocations are accurate and well documented. There are two principle types of costs incurred by the Corporate Office – costs associated with a specific center and costs associated with the general operation and responsibilities of the Corporate Office.

Costs typically allocated to a specific center include:

- Travel for a specific center meeting or event.
- Legal costs associated with a case or situation affecting a specific center
- Oversight committee meetings.
- Professional services such as consultants retained specifically for a particular Center.

c) Indirect Rates and Fringe Benefit Rates

On an annual basis, AURA submits an indirect cost rate proposal to NSF for approval. Please refer to the AURA Cost Policy Statement for Indirect Rate calculation processes and procedures.

12. Travel in General

Travel at AURA expense must be approved in advance by the AURA President or a designee for Corporate Office personnel, and by the Center Director or a designee as appropriate for Center personnel. AURA employees must submit a Travel Request prior to travel. Official, company-reimbursed travel cannot take place without a properly executed travel request.

a. Applicants for Employment

Payment of travel costs for personal interviews of applicants requires advance approval by the President or Center Director, or a designee, as appropriate. For certain positions, payment for family members to accompany the applicant may be authorized in advance by the President, Center Director or a designee.

b. Others for whom AURA travel may be authorized:

- 1) Guest Investigators/General Observers and Scientists - as authorized by the Director in each case.
- 2) Guest Investigators/Graduate Students - as authorized by the Director in each case.

- 3) Summer Visiting Scientists and Summer Research Assistants - travel authorization is implicit in employment.
- 4) Center Consultants - as arranged for in each case by the appointing authority.
- 5) Appointees to the scientific, technical or administrative staffs who are recruited from or transferred to locations more than 50 miles from the Center site are authorized to relocate their families and household effects to the site at AURA expense. (See Section D below for details.) The Director or a designee is authorized to act for AURA in arranging these relocations.

c. Mode of Travel

- 1) Normal method of air travel is by U.S. commercial airlines, by the most economical airfare available at the time the reservations are made, providing that such reservations do not result in associated additional expense exceeding the sum that would otherwise be saved or that it result in unacceptable delays in the travel schedule. Exceptions will be allowed only when the most economical fare or a U.S. carrier is not available, when significant delays or costs are involved, or in cases involving the health of the traveler. In addition, exceptions involving particularly international travel will be based on expected duration of uninterrupted travel. Except in cases of emergency, use of first class accommodations must be approved in advance by the Director or the President.

- 2) Except for trips between Center headquarters and their related remote locations, use of private vehicles for official business trips must be approved in each instance in advance by Center Directors or a designee.

If use of the private vehicle is approved as being more advantageous to the Center, reasonable lodging and meals en route will be paid. The traveler will be reimbursed at the currently authorized rate for the direct distance to point of duty and return to the Center site.

If approval is for convenience of the traveler, travel time in excess of that required by a common carrier will be charged to vacation leave; and meals and lodging en route will not be paid. Reimbursement will be at the most economic airfare available at the time of travel between the same two points.

- 3) Unless Company transportation is provided, employees who use their private vehicles between a Center location and its remote location, e.g., Tucson and Kitt Peak, on

officially requested AURA business, may be paid the currently authorized rate for direct travel.

For information on rental vehicles, see Section E below.

d. Travel Advances

Employees may request a travel advance when the Travel Request is submitted. An accounting will be made for all monies advanced for travel expenses and any remaining cash should be returned to AURA within ten business days after returning from the trip. Travel advances should not exceed expected expenses.

See additional memo regarding Accountable Plan status and substantiation requirements.

d) Travel Expense Policy & Report Processing

AURA Board and Committee members, including certain invited guests, when required to travel on official AURA business shall be reimbursed for actual and reasonable expenses upon the approval of a Travel Expense Report. The determination of which invited guests are subject to actual and reasonable expense reimbursement is at the discretion of the Center Director. Center Director approval is to be attached to the Travel Expense Report. For AURA Board and Committee members, receipts are required for any expenses \$25.00 and over. Original receipts must be attached to the report, as required by contract regulation. Scanned receipts are accepted for reimbursement purposes as long as the original receipt is kept and available for examination. Original receipts must be held for a period of 3 years. If the individual is no longer an employee of AURA, they must turn in any original travel expense receipts dating less than three years.

Employees of AURA and non-employees, excluding AURA Board and Committee members and certain invited guests (see above), when required to perform official business shall be reimbursed for reasonable expenses as defined within this policy in section B4. A travel expense report (TER) will be submitted and all receipts uploaded through the Reqless TER system.

13. AURA Travel Expense Reimbursement Policy

All travel expenditures must be specifically authorized by Center or Corporate management and must be in accordance with AURA policy. AURA Centers may establish travel policies and procedures that comply with AURA travel expense reimbursement policy cited below and are consistent with the appropriate funding agency rules and regulations.

AURA Corporate Office employees are authorized to use their corporate-issued credit cards for any travel expenses on all travel authorized by AURA.

Original receipts must be attached to the report, as required by contract regulation. Scanned receipts are accepted for reimbursement purposes as long as the original receipt is kept and available for examination. Original receipts must be held for a period of 3 years. If the individual is no longer an employee of

AURA, they must turn in any original travel expense receipts dating less than three years.

a. Meals and Incidentals

- 1) Meals and incidental expenses (M & IE) will be reimbursed on a per diem basis in accordance with Government Federal Travel Regulation amount for M & IE. All per diem reimbursement requests should be reported daily when completing the travel expense report.
- 2) Meals & Incidental per diem allowance is a daily payment based on government calculated rates instead of reimbursement for actual expenses. It is separate from transportation (except as noted below, under "Incidentals"), lodging and other miscellaneous expenses and covers taxes and service charges where applicable.
- 3) Meals are defined as expense for breakfast, lunch, dinner and related tips and taxes. They exclude alcoholic beverage and entertainment expenses, as well as expenses incurred for another person (see 5: Non-Allowable Expenses).
- 4) Incidentals are fees and tips to porters, baggage carriers, hotel maids or bellhops.

Also included are transportation costs between places of lodging or business to places where meals are taken.

For current GSA regulations please visit the Federal Travel Regulation site: <http://www.gsa.gov>

- 5) If a meal is provided by others, the daily per diem should be reduced by the corresponding amount of the meal breakdown noted on the government's per diem site (see 7 or 8 below). This includes meals provided by a host, included in conference/seminar fees or provided by the hotel for no additional cost (e.g., continental breakfast).

It is common practice for conferences to provide special meals when requested to meet medical dietary restrictions. However, if **medical** dietary needs make it necessary to forego the provided meal, then the traveler may claim up to the maximum meal allowance. The exception must be documented and a Doctor's attestation needs to be on file with Human Resources.

A meal provided by a common carrier does not affect your per diem.

- 6) 75% of the per diem rate is allowed for the first and last day of travel.

Except as noted in this section it is applied as follows:

More than 12 hours but less than 24 hours your allowance is 75% of the applicable M&IE rate.

When travel is 24 hours or more:

The day of departure is 75% of the applicable M&IE rate.
Full days of travel are at 100% of the applicable M&IE rate.

Last day of travel is at 75% of the applicable M&IE rate.

Note: it does not matter what time you depart or return.

- 7) For Continental US per diem rates, please see www.gsa.gov/perdiem or <http://www.defensetravel.dod.mil/perdiem/perdiemrates.html>.

The breakdown of the rates for breakfast, lunch, dinner and incidentals is found at www.gsa.gov/mie.

- 8) Non-continental US (e.g., Hawaii) and foreign meal expenses will also be reimbursed on a per diem basis. Rates may be found at: <http://www.defensetravel.dod.mil/site/perdiemCalc.cfm>.

The breakdown of the rates for breakfast, lunch, dinner and incidentals is found at:
<http://www.defensetravel.dod.mil/site/perdiem.cfm>.

- 9) Typically, meals will not be reimbursed for local travel [less than fifty (50) miles from the employee's place of employment.]

Each AURA center is required to develop procedures for communication, reporting and documenting travel expenses in accordance with this policy. Upon AURA approval, adjustments to per diems are allowable for specific locations. However, no per diem may be adjusted higher than the current federally published GSA or federal rate.

Center policy may allow for other exceptions to this policy on a case-by-case basis as long as these exceptions are approved in advance by Center management, are within allowable federal guidelines and AURA policy, and are well documented as to why the exception is necessary.

All efforts shall be made to adhere to the designated per diem of the location. However, that is not always possible. In general, the maximum daily rate for subsistence expenses shall not exceed 150 percent of the applicable maximum per diem rate (rounded to the next dollar).

b. Conference and Registration Fees

Conference and registration fees must be approved by center management and demonstrated to be necessary and relevant to attendee's position.

c. Lodging

- 1) Actual and reasonable lodging expenses are an allowable cost, subject to the specific rules and regulations of the sponsoring agencies and deemed reasonable by Center management. AURA allows a conference participant to stay in the "conference headquarters" hotel even if other, less expensive, hotels are available.
- 2) Unless a lodging per diem is authorized by AURA in advance, all lodging expenses must be substantiated with an original receipt from the lodging establishment. The receipt must provide sufficient detail for AURA to determine the cost of the room and any other charges included on the bill.

d. Commercial Transportation.

- 1) All AURA air travel should be procured at the customary standard commercial rate (coach or equivalent). The difference in cost between first-class air accommodations and less than first-class air accommodations is unallowable except when less than first-class air accommodations are not reasonably available to meet necessary mission requirements, such as where less than first-class accommodations would (i) require circuitous routing, (ii) require travel during unreasonable hours, (iii) greatly increase the duration of the flight, (iv) result in additional costs which would offset the transportation savings, or (v) offer accommodations which are not reasonably adequate for the medical needs of the traveler. First or business class rail or air service must be pre-approved by Center Management.
- 2) Recipients of Federal financial assistance funds are required to abide by the provisions of the "Fly America Act". This rule applies even if the cost is higher and the service less convenient. For exceptions to this rule, please see 41 CFR 301-10.138.

e. Automobile Expense

- 1) AURA will reimburse the traveler for actual miles traveled in one's personal automobile, provided that it is associated with a pre-approved travel request and the actual cost does not exceed the lowest tourist or coach commercial airfare.
- 2) Mileage will be reimbursed from the point of origin at the federally approved rate that can be found at:
<http://www.gsa.gov/portal/content/100715>
- 3) AURA may periodically revise its mileage reimbursement rate. In no case will this rate exceed the mileage reimbursement rate set by the Internal Revenue Service.

f. Non-allowable Expenses

Non-allowable expenses, such as those listed below, will not be reimbursed without proper authorization and must be paid from non-contract discretionary funds.

- a. Travel insurance;
- b. Entertainment;
- c. Alcoholic Beverages and,
- d. Goods or services for personal use.

g. Rental Vehicles

Rental of vehicles must be approved in advance and will be justified on the basis of need to conduct official business and not as a convenience to the employee.

AURA will not reimburse the cost of insurance coverage provided by rental agencies for vehicles rented within the contiguous 48 states, Alaska, Hawaii and Puerto Rico as this coverage is already provided by AURA's comprehensive automobile general liability insurance. In all other locations, the optional insurance should be accepted and the cost will be reimbursed.

14. Corporate Office Travel Policy

In addition to the travel policies above, Corporate Office Staff shall comply with the following procedures for travel reimbursement.

The Corporate Office Travel Policy provides procedures for reimbursement of Corporate Office staff travel expense. This policy is designed to clarify procedures and ensure compliance with government regulation and AURA policy on travel expense. AURA's travel policy is presented in Section B, XIX of the AURA Personnel Policies and Procedures.

All Corporate Office Staff must submit a Travel Request form (TR) in Reqls for travel for meetings further than 50 miles from the individual's residence. If the meeting event travel is within 50 miles from the individual's residence, a travel request is not required, unless the travel includes expenses are reimbursable if overnight accommodations are required. Each travel expense report must include an agenda for a meeting, if applicable. This travel request should include all expenses not paid through the Corporate AMEX card.

The policy below refers to "unallowable expenses". Unallowable expenses are those identified by government policy as not qualifying for reimbursement under government contracts or cooperative agreements. AURA may allow reimbursement for these expenses when they relate to government oversight events or as part of business related meal. However, those unallowable costs must be approved by the employee's supervisor and carefully identified as to ensure that they are not charged to a contract or cooperative agreement but rather charged against corporate reserves. It is required that these costs are specifically identified to ensure that they are correctly classified as an unallowable expense for the purpose of government reporting.

a. Lodging and Transportation

Lodging and travel expense are reimbursed at actual cost. Lodging expense is subject to a "reasonableness" test. Lodging costs may not exceed 150% of the government per diem for lodging without the permission of the employee's supervisor. Government per diem rates for lodging expense can be found at www.gsa.gov.

b. Meals

All Corporate Office Staff **must** submit an expense report for meetings further than 50 miles from the individual's residence. Each expense report must include a per diem calculation for meals. Actual charges for meals either on the Corporate credit card or on a personal credit card or paid with cash **are not** a substitute for the per diem calculation. Rather, they are treated as a reduction to per diem and must be accounted for on the expense report. The purpose of the use of per diem charge rather than

reimbursement for actual charges is to ensure that total reimbursement for meals and incidentals do not exceed the government per diem.

Special care should be taken to review all hotel bills to ensure that meals charged to the bill are applied against the per diem. Personal charges to the hotel bill (for items such as movies) do not qualify for travel reimbursement and must be refunded by the employee to AURA.

c. Reimbursement Process

Employees must complete and submit an expense report to get reimbursement for travel expenses. The aforementioned Travel Request (TR) number that was generated when the Travel Request was submitted in Reqless must be referenced on the expense report. Employees shall submit the expense report to the Corporate Office Business Manager who verifies the report.

Employee expense reports will be held until charges from the corporate credit card corresponding to the trip time have come in to ensure that all any per diem charges on the corporate credit card are accounted for on the employee's expense report.

It is the employee's responsibility to inform CAS when all charges corresponding to the trip are complete and when the Travel Request (TR) is ready to be closed.

d. Calculating Per Diem

The government per diem rates can be found at www.gsa.gov. Receipts for personal meals are not required. Each expense report must include the number of days of travel and the per diem rate for the destination of travel. On travel days you are eligible for 75% of the per diem. However, if the travel day also includes meeting time, you may charge the full per diem amount. For meetings where all meals are provided, you may not report any per diem. For meetings where one or two meals are provided the per diem must be pro-rated by the corresponding amount of the meal breakdown noted on the government's per diem site.

Dietary considerations requiring separate meals are an exception to this rule.

If a business related meal expense involves multiple parties an itemized receipt is required. This receipt must identify the individuals who attended the meal and ensure that any charges for alcoholic beverages are clearly identified so that they may be properly accounted for as an unallowable expense to AURA. An itemized receipt should identify your portion of the meal. That portion must be charged against the per diem. If an itemized bill is not available, calculate your share by dividing the bill by the number of attendees. Best effort is required to estimate the portion of the bill that might be associated with alcohol.

15. Director's Discretionary Research Fund (DDRF)

The Director's Discretionary Research Fund is a fee based fund given to AURA by NASA based on the Space Telescope Science Institute's performance. The fund is restrictively used for STScl's scientific research under the discretion of the STScl director. Both the Institute and AURA maintain financial record associated with the DDRF. At the Institute, records are maintained for the DCAA to audit the fund for allocability and allowability. However, DDRF financial activities are disclosed under AURA's heading in AURA's financial statements. Conversely, DDRF is not part of the prime contract activity at STScl and is therefore not reflected under STScl's heading in the AURA financial statements.

The DDRF is designed as a pool of money used to pay for research time for science staff at STScl. At the beginning of each month, NASA is billed for the previous month's DDRF fee (as determined in our contract with NASA. The fee is then wired to AURA's bank account. Towards the end of the month, an invoice is received from STScl, for the previous months' billable DDRF activities. This invoice is reviewed and approved by the Vice President for Administration.

16. Valuation of Investments

All investments held in bonds, mutual funds and other long term investment vehicles shall be held at current market value. Market value shall be determined by monthly statements received from the bank or other external investment managers. Changes in the fair market value of investments shall be recorded monthly.

Treasury and Certificates of Deposit shall be presumed to be held until maturity. They will be valued in the accounting system at purchase cost. Interest income shall be recorded when the Treasury of Certificate of Deposit matures.

17. Signatory Authority on Bank Accounts

In the Corporate Office, Signatory Authority resides exclusively with the Vice President for Administration and the President. Signatory Authority over the AURA CAS accounts in Tucson reside with the President, Vice President for Administration and/or the Senior CAS Manager. There are two zero balance accounts which have signature authority delegated to local staff on Kitt Peak and Sacramento Peak. The Controller has the authority to wire funds from both the Suntrust and PNC accounts for up to \$500,000, to AURA accounts at different banks.

18. Purchasing

Please refer to the Procurement Manual for all Purchasing guidelines.

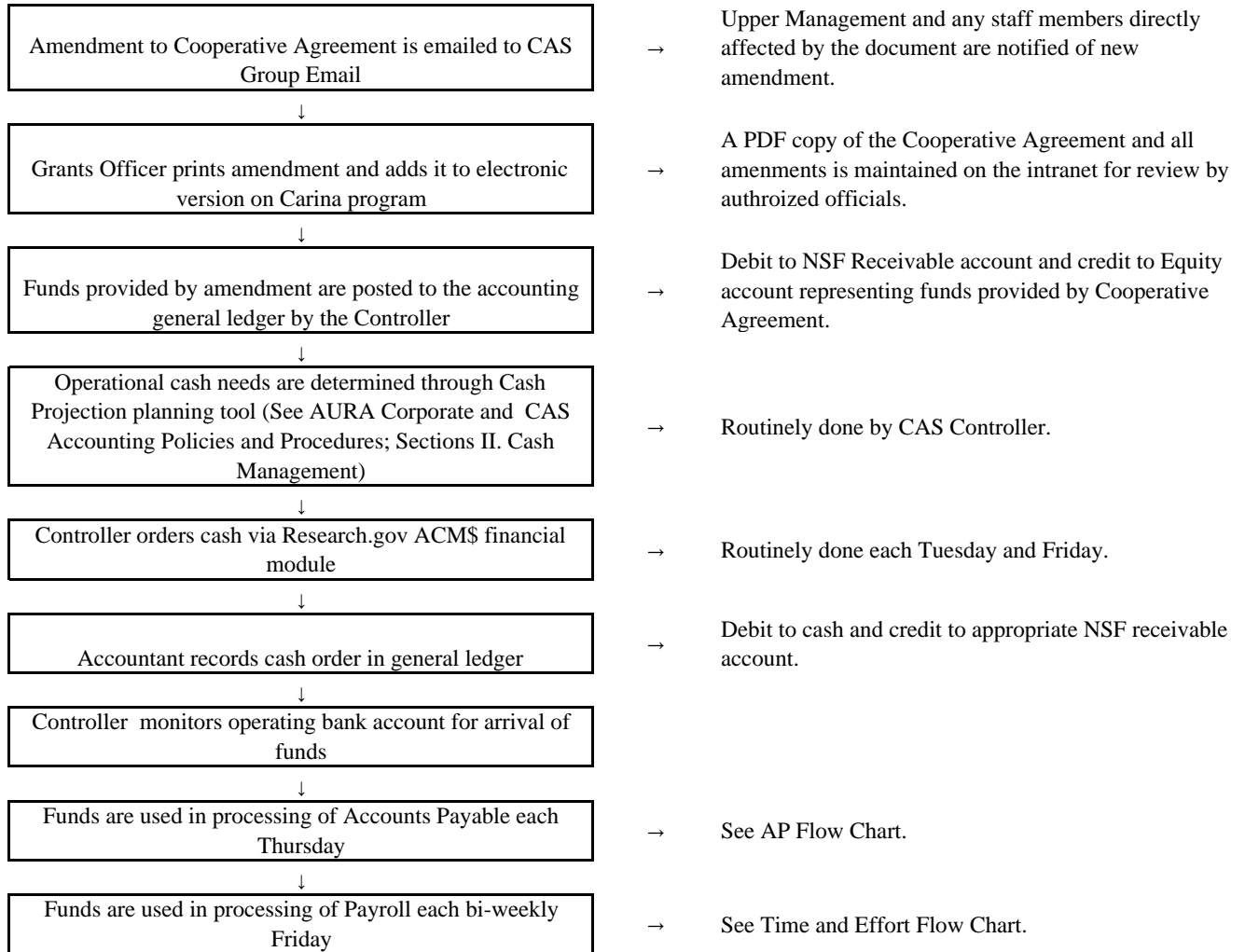
19. Capital Equipment and Work (Construction) in Process

Capital equipment purchases are tracked through account numbers. All capital items purchased are logged into the PIMA system. At the end of each year and periodically during the year a reconciliation is done from the PIMA system to the accounting system to ensure that all items are properly recorded.

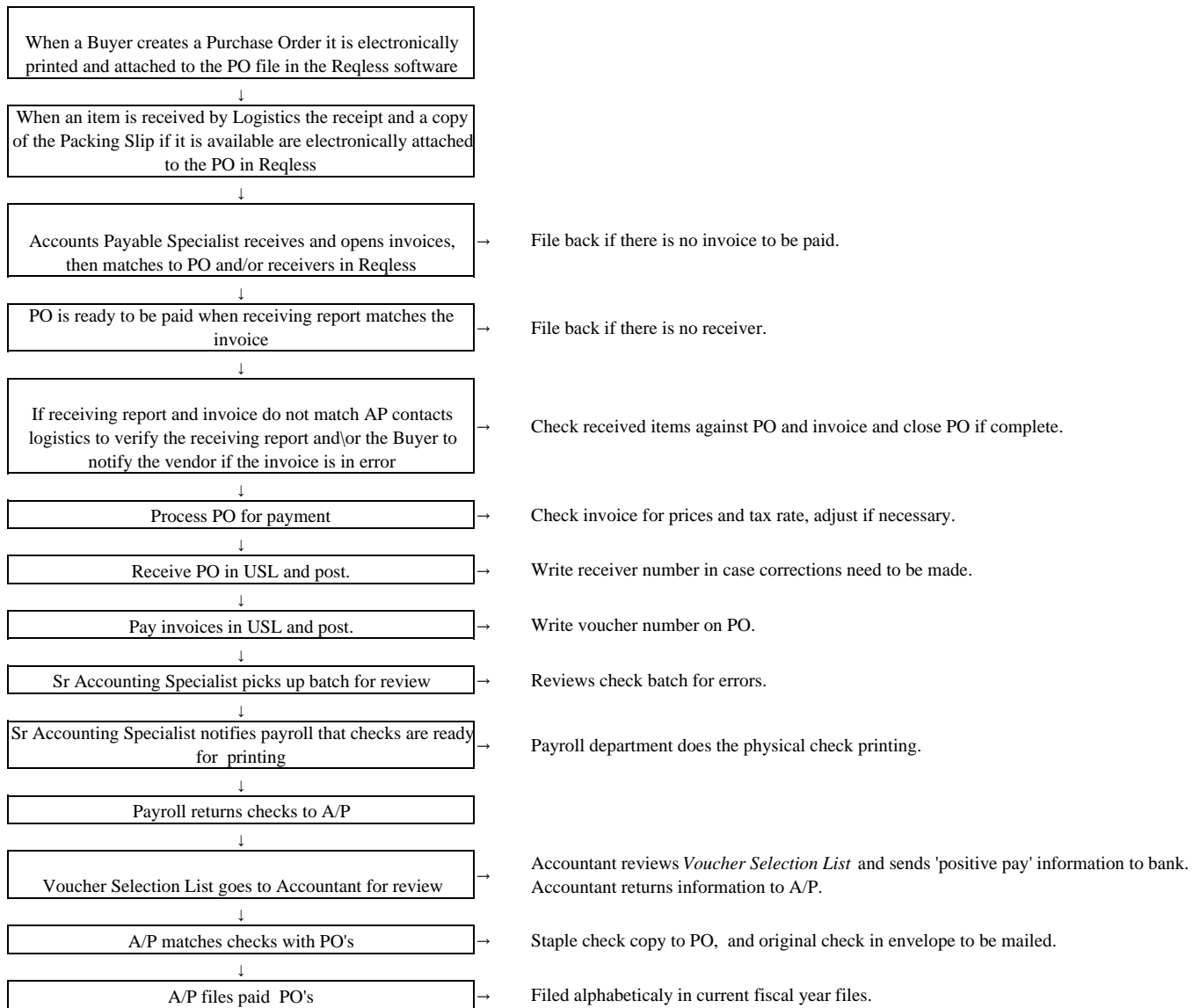
Work and/or Construction in Process is tracked through account numbers. At the end of each year an email is sent to the manager in charge to verify the work in process activity and determine whether it will continue as WIP; be charged out and expensed; or

converted to a capital asset. Construction in process accounts are carried over until the completion of construction and operations begin.

Appendix A
NSF Funds Flow Chart

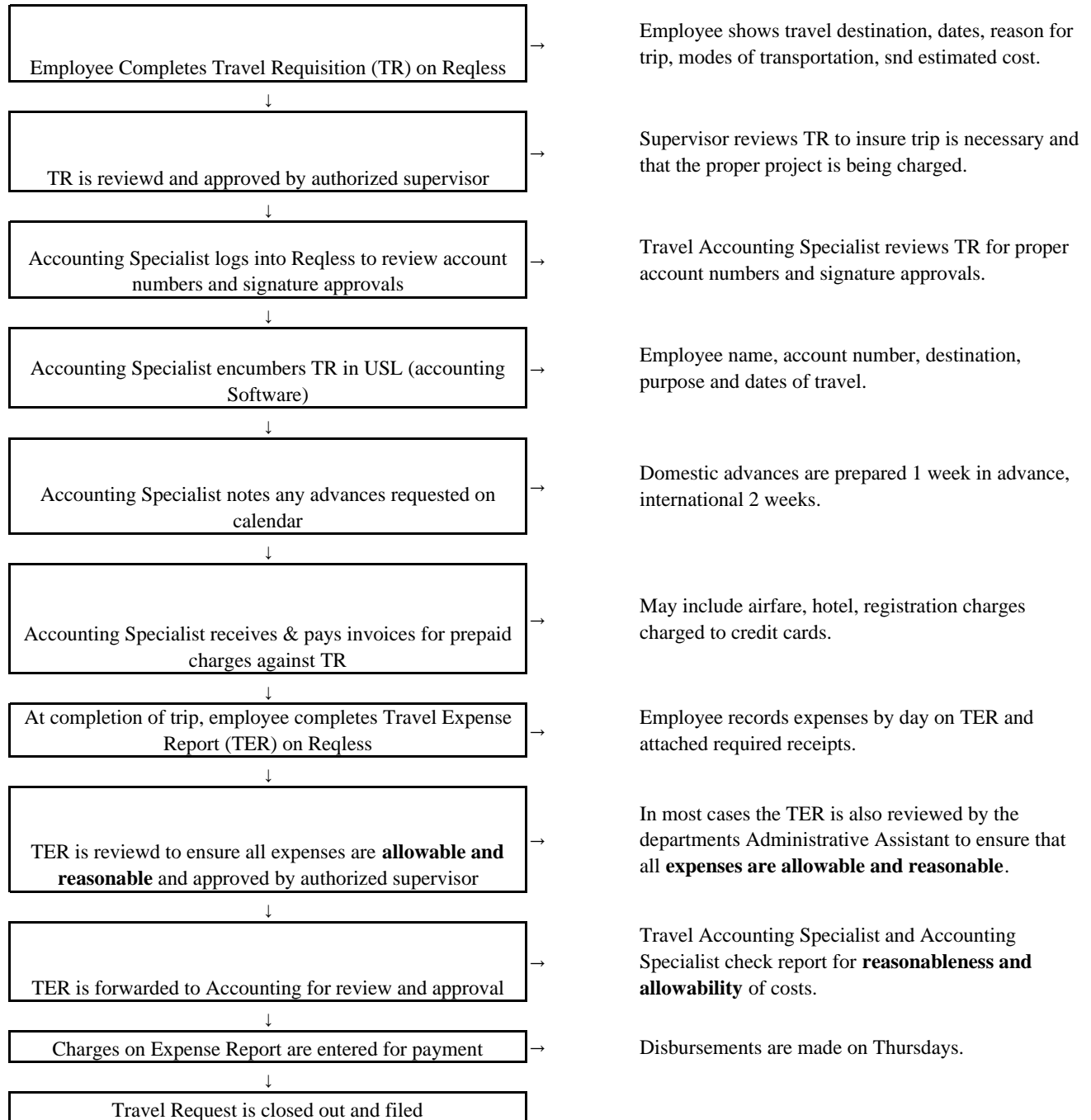


Appendix B
Accounts Payable Flow Chart



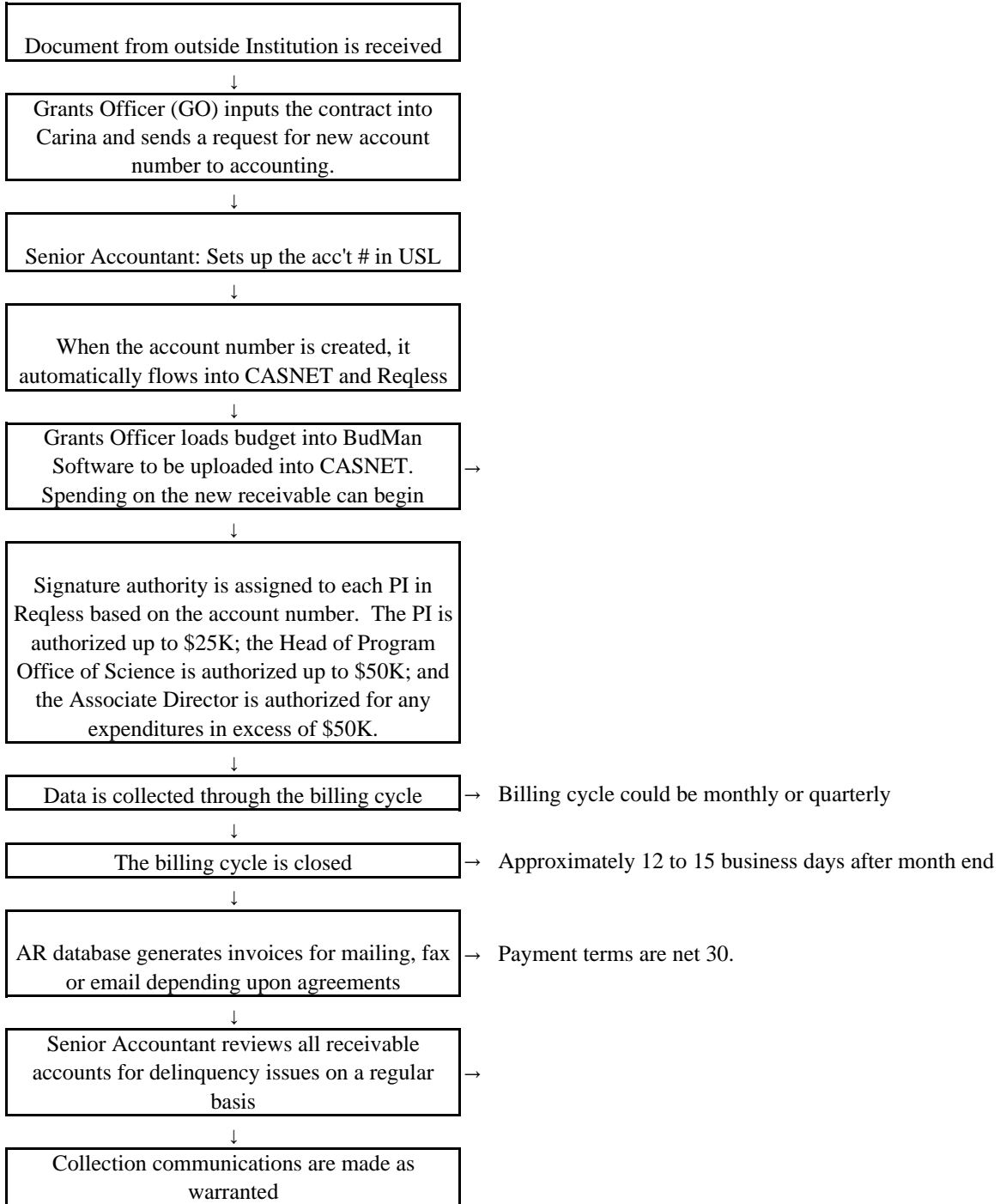
Appendix C

Travel Expense Flow Chart



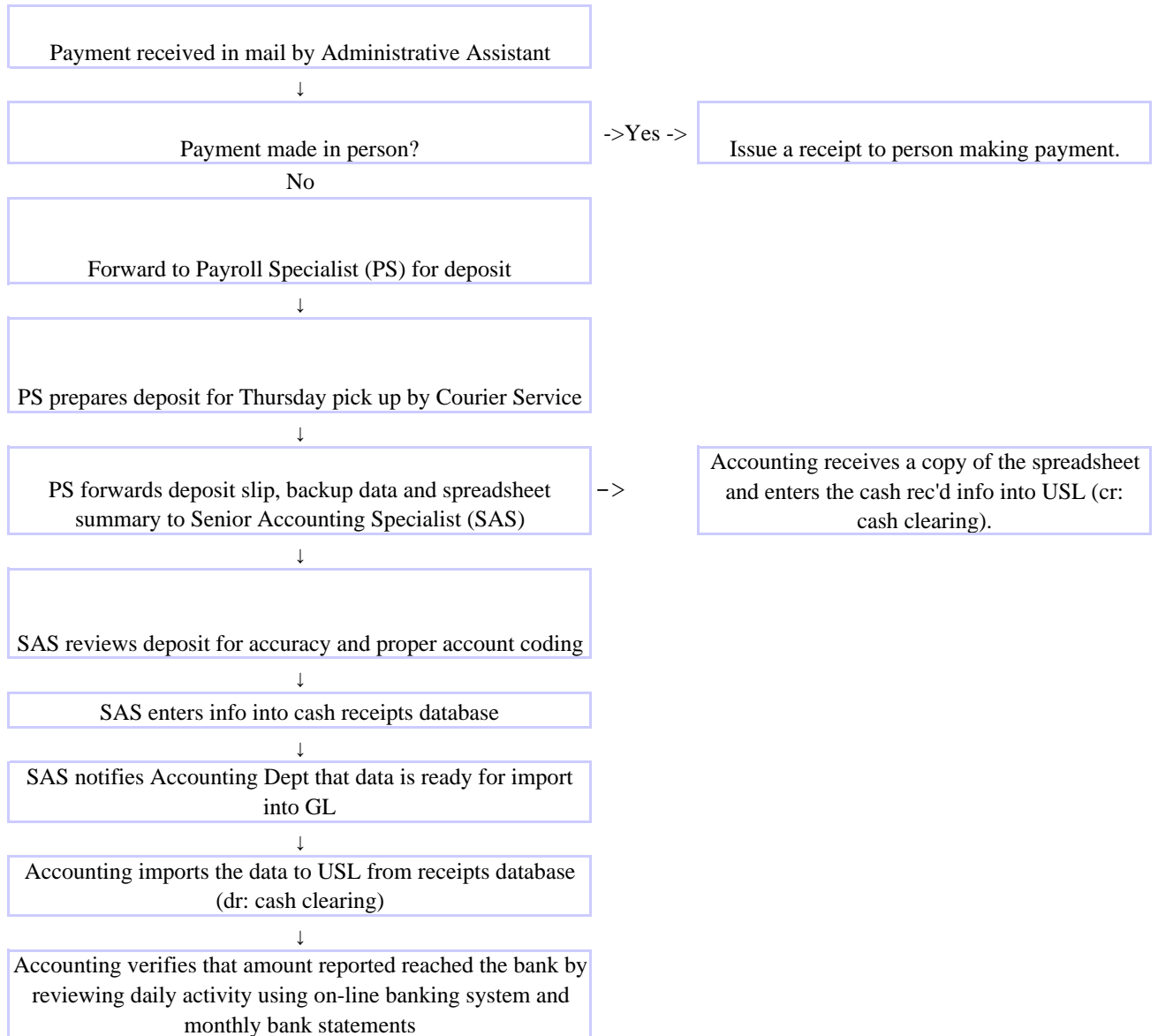
Appendix D

Accounts Receivable (non-NSF) Flow Chart



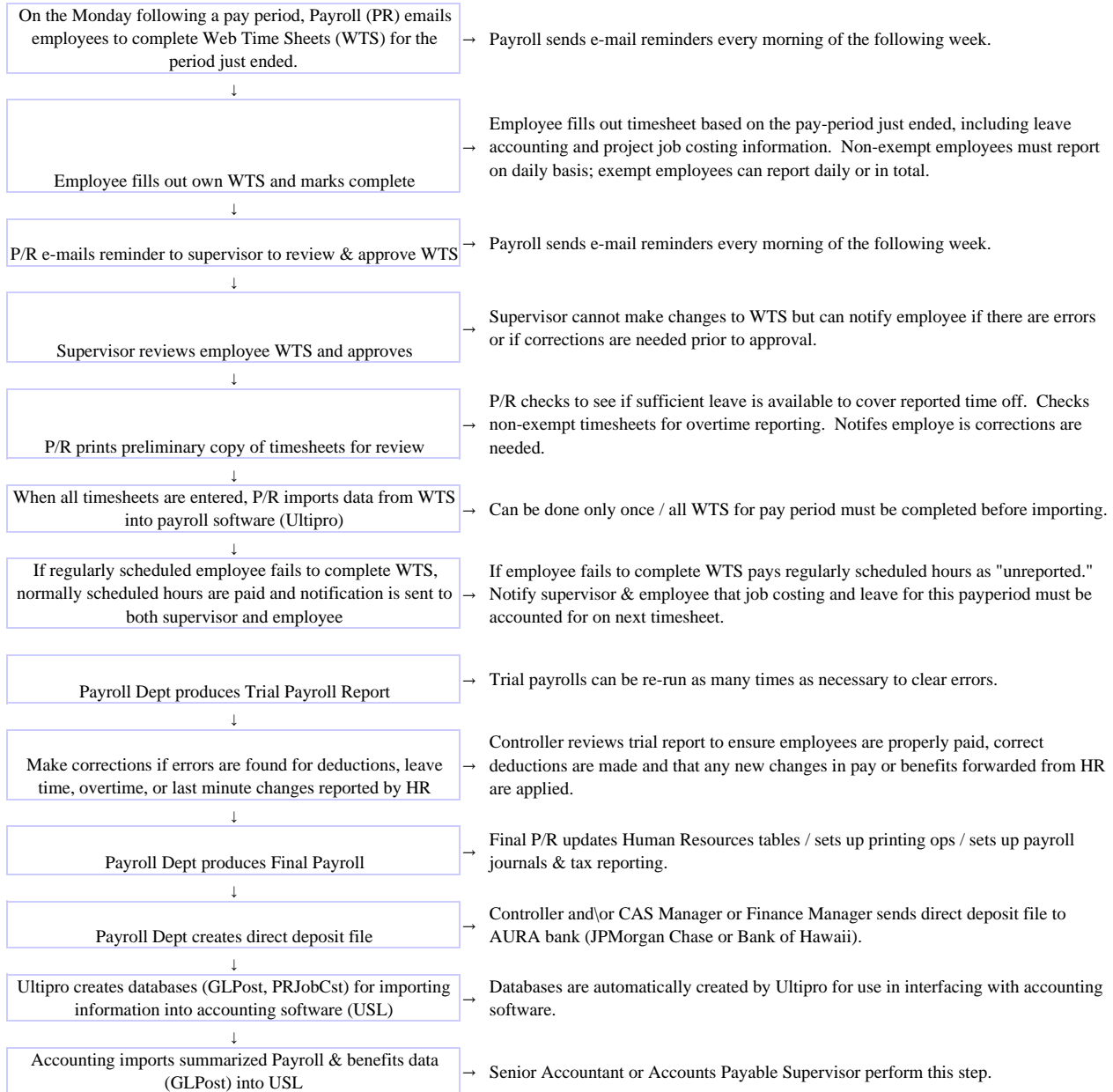
Appendix E

Non-NSF Revenues and Cash Receipts Flow Chart



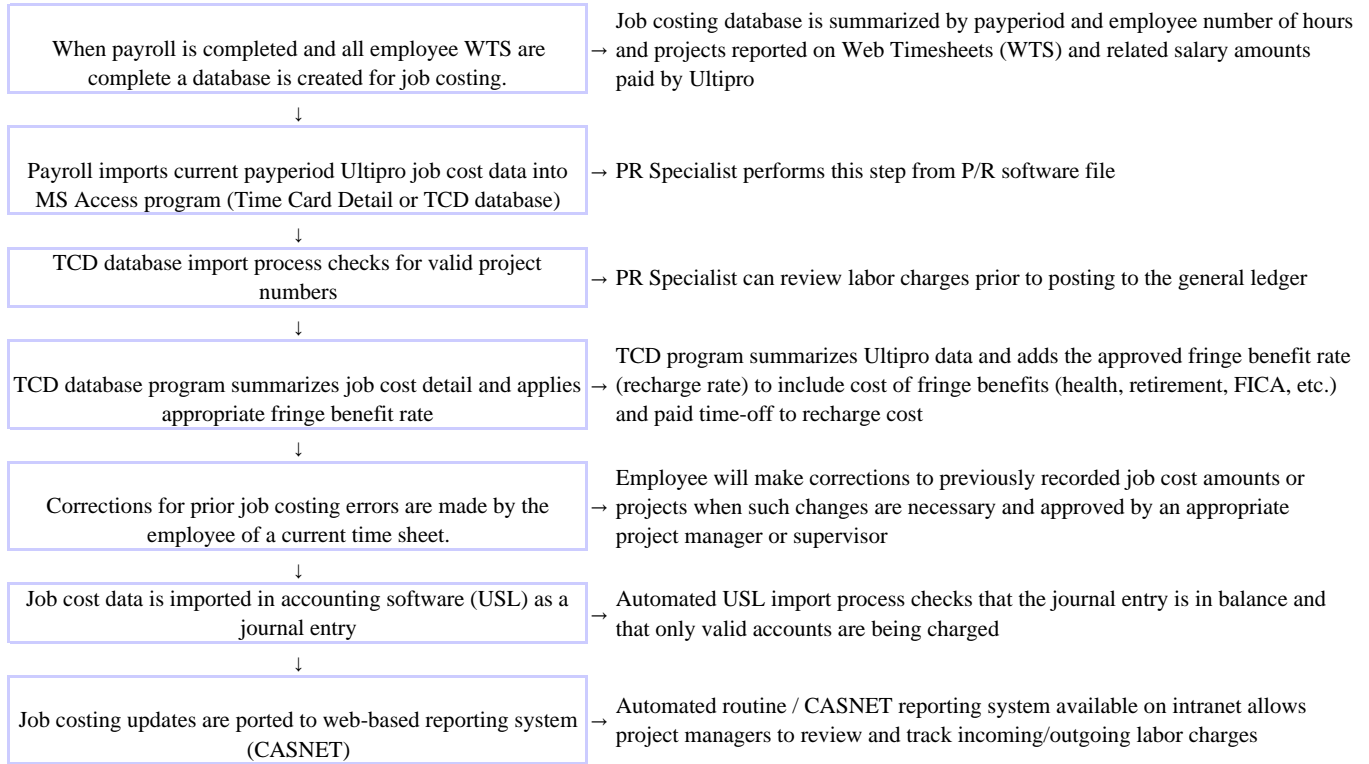
Appendix F

Payroll Time And Effort Reporting



Appendix G

Job Costing



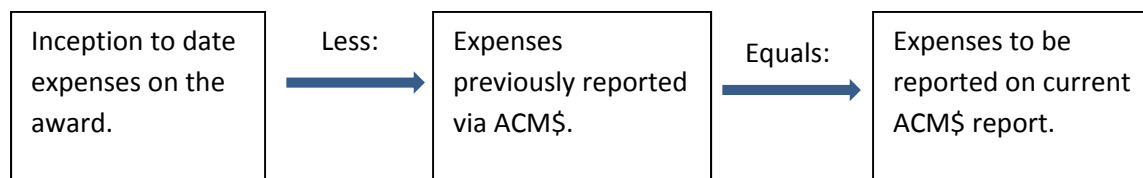
Appendix H

ACM\$ calculation for cash orders – How it works

Each Award received from NSF receives a distinct series of account numbers within the chart of accounts that tracks expense activity. See sample below:

ACM\$ Requests															
												Create ACM\$ Cash Request	View ACM\$Assign		
Requests															
Add New Record															
Show 10 entries												Search:			
GrntNbr	Desc1	Desc2	Def1	Def2	Def3	Def4	Def5	Def6	Beginning Balance	Closed?	GL Number	Allocation	Start Date	End Date	
1202910	LSST CSA-2	LSST CSA-2	KLM						0.00	No	K11000022000	18.00	7/1/2014	9/30/2022	Edit
1011851	NSO CSA-3	NSO CSA-3 ATST (MREFC)	SWM						9559357.76	No	S11000023000	24.00	10/1/2010	12/31/2019	Edit
0950945	NOAO O&M CSA	NOAO CSA-1 O&M	NY15	NYD					155424656.51	No	N11000021000	0.00	10/1/2009	9/30/2018	Edit
1460743	Y-TPO20-002	NSO REU Program	YTP020002						0.00	No	YTP020002999	0.00	6/1/2015	5/31/2017	Edit
1262829	NOAO REU	NOAO REU Grant	ZKP009005						0.00	No	ZKP009005999	0.00	5/1/2013	4/30/2017	Edit
1062976	NOAO CSA-5	NOAO CSA-5 REU South	NY3000002						77689.40	No	N11000025000	0.00	10/1/2011	9/30/2016	Edit
0647970	Gem CSA	GEMINI CAS O&M	G						208617808.79	No	G11000021000	0.00	1/1/2006	3/31/2016	Edit
1421197	NOAO O&M	NOAO O&M CSA-6	NA-NW	NX0000000-NY14ZZZZZ	NY1600000-NY3000001	NY3000003-NY9999999			0.00	No	N11000026000	41.00	10/1/2015	12/31/2015	Edit

Each time the ACM\$ cash order calculation is run, the formula is as follows:



Expenses to be reported on the current ACM\$ are totaled, and then compared to the current total cash request. As AURA works on an advance basis for its cash requests, the cash request is usually greater than the expenses reported, any delta is allocated as a reported expense among the ‘core’ AURA awards using a predetermined allocation rate calculated based on historical payroll costs, see AURA Cash Management Policy, Section II.

Core awards are defined as:

1202910 – LSST CSA-2 - MREFC Construction funds

1421197 – NOAO CSA-6 – O&M funds

1011851 – NSO CSA-3 – DKIST MREFC Construction funds

0415302 – NSO CSA – O&M funds

The predetermined rates are set by analyzing typical cash required for payroll cycles. The rates are evaluated and adjusted on a regular basis.

While this calculation typically yields positive expense amounts for expenses being reported on each award, the advance cash request remains an estimate and circumstances exist that can result in a negative expense report.

These circumstances include:

Timing – Because federal regulations limit the amount of cash AURA may have on hand to 2-3 business days, requests for estimated cash required for operations are placed at least twice per week. In some cases, expenses associated with the first cash request of the week have not been posted before the second cash order is placed.

Examples:

- 1) Payroll - AURA payroll expenses occur on a bi-weekly basis every other Friday. In order to assure that cash is on hand when direct deposit ACH files, retirement contributions and taxes due are transmitted to our banks in advance of these payments, cash is ordered the Friday before the payday. The process to record the expenses associated with the pay cycle are processed on the payday, five business days after the cash is requested and three days after the cash is received in the bank. While this process is occurring, AURA typically must place a second cash request for non-payroll expenses, typically the Tuesday during this above described cycle.
- 2) Chile expenses – Cash for operations in Chile is ordered and transferred to accounts in Chile on a weekly basis. As AURA can have only one bank account assigned to received cash via ACM\$ (in Tucson), the timeframe from when cash for Chile operation is requested via ACM\$ and received in the Chile bank accounts is one to two days longer than cash received for US operations. Expense activity in Chile is recorded in \$CLP and transmitted to the US office on a weekly basis. The process of translating

the data from \$CLP to \$US and imported to the official accounting ledger in \$US typically is achieved the next day.

While every attempt is made to post expense data in a timely manner and to take these circumstances into consideration when subsequent cash requests are processed, some of the circumstances that create negative expense reports are difficult to avoid. However, over time the inception to date expense calculation resolves the negative expense activity caused by the timing events.

Adjustments – From time to time, AURA has recorded adjustments to expense activity which transferred costs from one award to another.

Example:

During FY15, the DKIST project used construction funds from two distinct awards, 1011851 –DKIST MREFC funds and 0415302 – ARRA funds. The ARRA award had a ‘hard’ expiration date during FY15, so it was critical to expend all of the funds during the fiscal year. Tracking normal expense activity to meet a balance of zero at a specific date, was deemed to be an effort that would result in a success without requiring adjustments to be made. With the consent of NSF through an approved change order request, costs recorded on the MREFC award were transferred to like efforts on the ARRA award to achieve a zero fund balance upon the expiration of the ARRA funds. This effort resulted in a large negative expense report for the MREFC award.