The Geophysical Institute Faculty, Staff and Student Manual

January 2003

Welcome to the Geophysical Institute

This manual is intended to help you become familiar with the policies of the Geophysical Institute and the University of Alaska. These policies and procedures have proven successful as rules that promote the smooth and efficient operation of everyday business. If you are a new employee, I hope you will go beyond these pages to visit our various departments and service centers and meet your new co-workers. As you settle into your new job, please feel welcome to seek answers to your questions and to make suggestions on institute operations. It is my hope that each new faculty, student, and support staff member will soon feel at home. You should be aware that some rules and regulations which were tacitly recognized in your previous organization may not necessarily be universal and may not necessarily apply here.

The institute administrative staff has prepared this manual as a compendium of relevant federal, state, CEA & CBA, University of Alaska (UA) policy and regulations, and of internal institute guidelines. Should any of the material stated here conflict with present or future UA guidelines, rules, or regulations, the CEA or CBA will supercede the UA text. Regarding the material in this manual, please notify the institute Human Resources manager of any needed changes or suggestions for improvement.

Sincerely,

Roger W. Smith
Director

This handbook is provided as a guide and is not to be considered a contract. The Geophysical Institute reserves the right to make changes to the policies, procedures and other statements made in this employee handbook. Please refer to your collective bargaining agreement if applicable.

The first six months of this appointment is a probationary period. Employment designated as at-will may be terminated for any reason not prohibited by law or for no reason. In the event of a decision to terminate at-will employment, the supervisor will provide the employee with a written notice of termination. The notice need not state any reasons for the termination.

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The University of Alaska is an affirmative action and equal opportunity employer and educational institution.

Table of Contents

Part Two: Faculty and Graduate Student Research

Introduction to the Geophysical Institute

The Geophysical Institute (GI) conducts research in geophysics and allied fields, while offering advanced training and graduate education in polar studies through research instruction, apprenticeships, seminars, and field activities. The GI is the only academic center for geophysics at high latitude in the United States. The institute participates in many cooperative scientific programs of local, state, national and international significance, and the research faculty actively contributes to the formulation of research policies and programs for the polar regions.

In 1946 the U.S. Congress established the institute to focus on polar upper-atmosphere disturbances such as the aurora and their effects on radio communications. Although the study of the upper atmosphere remains an important scientific topic, our research has expanded into practically all geophysical disciplines. This reflects worldwide recognition of the global importance of the polar regions, as well as interest in Alaska's significant natural resources and natural hazards. The property of the institute was transferred to the University of Alaska in 1960.

Institute research is organized under seven disciplines: space physics; atmospheric sciences; snow, ice and permafrost; seismology; volcanology; tectonics and sedimentation; and remote sensing. The faculty is engaged in local and global efforts to generate basic scientific knowledge about our planet. Other institute efforts involve research applications of benefit to industry and commerce, defense, public safety, and environmental protection. Through teaching university courses and mentoring graduate students, the faculty works to train new generations of productive scientists. As part of a Land-Grant, Sea-Grant and Space-Grant public institution of higher education, the GI also participates in public policymaking, and disseminating geophysical information to the public.

Six human factors have enabled the GI to successfully grow and gain an enviable international reputation: the quality of the research; the confidence and support of the university and state; the ability of the scientific staff and students to respond quickly to newly identified research problems; careful but flexible planning; a capable technical support staff; and a dedicated administrative staff. A well-equipped library and technical service centers are at the disposal of GI researchers as essential elements for their work. The GI administrative offices, laboratories and service centers are housed in the eight-story C.T. Elvey Building and a portion of the International Arctic Research Center on the West Ridge of the UAF campus. Most observing equipment is at various field sites and facilities in the Fairbanks area, throughout Alaska and northwestern Canada, and in Greenland, Svalbard, and Antarctica.

Our Mission

- **To understand basic geophysical processes governing the planet Earth, especially as they occur in, or are relevant to, Alaska.**
- **To train graduates and undergraduates to play leading roles in tomorrow's society.**
- **To solve applied geophysical problems and developing related technologies of importance to the state and the nation.**
- **To satisfy the intellectual and technological needs of fellow Alaskans through public service.**

Part One: Institute Management and Regulations

I. HUMAN RESOURCE MANAGEMENT

1. Policies and Regulations

The University of Alaska is governed by an appointed Board of Regents, which is the university's ultimate policy-setting authority. Policies on human resource management matters are detailed in Chapter 4 of the University of Alaska Board of Regents Policy manual. All employees should read and understand the material pertaining to human resource management. Regulations established by the UA president appear in the University Regulations manual. Human resource matters discussed in these documents include general employment conditions and employee rights, benefits, and obligations. Copies of these documents are available to each employee in the Human Resources Office, or found at the website: (www. alaska.edu.bor).

Table of contents

2. Classification of Employees

Regular employees are categorized for administrative purposes as faculty (tenured, tenure-track and non-tenure), administrative/professional/technical (APT), and classified (clerical, technical, data processing, etc.). Some regular employees hold half-time or three-quarter-time positions.

Term employees are employed for the duration of a project, grant, or contract, or for a specified length of time. The University is not required to give notice of nonretention at the conclusion of the project, grant, or contract, or the specified length of time. Employment ends automatically at the conclusion of the project, grant, or specified length of time unless a new employment agreement is entered into. Term employees may be nonretained during employment, with notice as provided above. Such notice period, however, will not exceed the duration of the project, grant, or contract, or the specified length of time.

GI faculty are those who have accepted and hold appointment to academic rank or special academic rank and have an appointment with the GI. GI faculty are expected to supervise and support graduate students. The two major categories of GI faculty are tenure-track and non-tenure-track faculty.

Tenure-track GI faculty are those who hold academic ranks of professor, associate professor, or assistant professor and are eligible for tenure and promotion. Tenure for most tenure-track faculty resides in a department in which full-time GI faculty have an appointment for at least 2.25 months per year. These tenure-track faculty members are based in the GI and hold joint appointments with the GI and the academic department. Annual evaluations and evaluations for retention, promotion, and tenure of GI tenure-track faculty are conducted jointly by the GI and the department, with input weighted according to where tenure is based and how the appointment is apportioned. Tenure-track faculty are evaluated on their performance in research, teaching, and service, with workload distribution depending on the specific position. For purposes of collective bargaining, tenure-track faculty are represented by United Academics Union. Please read the collective bargaining agreement for more information: http://www.alaska.edu/labor/current/united/table2001.html

Non-tenure-track GI faculty are those who hold qualified special academic ranks of research professor, research associate professor, or research assistant professor and are eligible for promotion but not tenure. These faculty are employed to focus mainly on research and are supported primarily by grant funding, but are guaranteed a minimum level of GI funding equivalent to that of tenure-track faculty. Although research-track faculty may not necessarily have a regular appointment in a department, they may be granted approval by a department to teach courses and/or advise graduate students within that department. A revised workload agreement must be submitted to the GI Director. Annual evaluations and evaluations for retention and promotion of research-track faculty are conducted by the GI. For purposes of collective bargaining, non-tenure-track faculty are represented by United Academics Union. Please read the collective bargaining agreement for more information: http://www.alaska.edu/labor/current/united/table2001.html

In addition to the tenure-track and Non-tenure-track faculty positions, there are other **special academic rank titles** preceded by the term **adjunct, affiliate, visiting, or clinical.** For details on these and other faculty appointments (such as distinguished visiting professors), please see UA Board of Regents policies and regulations.

Joint appointments at the GI also may be granted to faculty members doing externally funded research within the GI but based in another department or college. Faculty with such joint appointments are required to submit proposals through the GI if they are in the discipline area covered by the appointment.

Exceptions to this requirement can be granted only by the director. The level of GI funding for such an appointment, if any, is determined by the director based on the level of external support raised by the appointee. Joint appointment contracts must have the director's approval each year before contracts are issued.

Post-doctoral fellow is a research position granted only to an individual who has been granted a PhD degree. This is a research position supported entirely by grants and/or contracts, and no GI funding is guaranteed. A GI faculty member must sponsor the post-doctoral fellow for work on a specific project, and that sponsor is responsible for obtaining the grants and/or contracts to support the position. A program of continuous competitive recruitment exists for potential candidates. This search program does not require the more formal methods required for faculty positions. The position is normally awarded for one year to a person who has just completed the PhD degree, with possible renewal for a second year. In exceptional circumstances, a post-doctoral fellowship may be renewed for a third and final year, provided it is fully supported by external funds. A post-doctoral fellow may not be promoted, but may apply with equal opportunity for advertised tenure- or non-tenure-track positions. For purposes of collective bargaining, a Post-Doctoral Fellow is represented by United Academics after the first year of being appointed into this position, and is obligated to pay to the union an agency fee as a condition of employment as required by the Agreement after the first year.

Research associate is a research position granted to allow a specific qualified person to write proposals and conduct research within the GI that is externally funded through allowable sources. The position is normally granted at the PhD level, but can be granted by the director to other qualified individuals. A GI faculty member may nominate a person as a research associate with the concurrence of the appropriate research discipline group and the approval of the GI Director. A research associate defines his or her own research directions, and is solely responsible for obtaining the grants and/or contracts necessary to support that research. No GI funding is guaranteed for such a position. The more formal recruitment methods required for faculty positions is not appropriate for a research associate position as defined here, so such a position will normally be filled by direct appointment, provided permission of the Equal Employment Opportunity office is granted on a case-by-case basis. Appointment as a research associate is for a fixed period not to exceed three years, but can be renewed for an indefinite number of fixed periods. The conditions for renewal by the director include the history of funding and evaluation of performance by the appropriate research discipline group and the GI director. A research associate may not be promoted, but may apply with equal opportunity for advertised tenure- or non-tenure-track faculty positions. For purposes of collective bargaining, Research Associates are represented by the United Academics Union. Please read the collective bargaining agreement for more information: http://www.alaska.edu/labor/current/united/table2001.html

A **Principal Investigator (PI)** is anyone qualified and eligible to write and submit proposals and conduct research through the GI, including tenure-track or non-tenure-track faculty primarily based in or with joint appointments with the GI, retired GI faculty, and research associates. Under some circumstances, post-doctoral fellows, APT personnel, and graduate students may qualify as PIs. All PIs are eligible to attend institute PI meetings, but only regular faculty primarily based in or with joint appointments with the GI are eligible to vote at the institute PI meetings.

3. Sabbatical Leave

Tenured or tenure track faculty who have completed six consecutive years of service within the university system, shall be eligible for consideration to take sabbatical leave during the seventh or subsequent year of service. See CBA.

Applications for sabbatical leaves shall be submitted to the Chancellor through channels and procedures contained in the CBA. Each application shall include a statement outlining the program to be followed while on sabbatical leave and indicating any prospective income from outside the university system. Funding for **tenure-track faculty** sabbatical leaves will come from GI funds and from departmental funds. The ratio of funding between the GI and the department will be based on the workload assignment in the two units. Additional funds may come from a faculty member's grants or contracts, if appropriate.

4. Special Assignments

Although Non-tenure-track faculty may not be granted a sabbatical leave, they can get approval through the director for a special assignment for a specified period of time for professional development, during which the faculty member receives compensation in part or in total from the university. Special assignments shall not be considered breaks in service or affect the privileges and the status of that person with the University, unless specified otherwise in Regulation. Any special conditions of such special assignments shall be clearly set forth in writing. They shall become binding only after having been signed by the unit member concerned and by the appropriate chancellor or designee.

5. Benefits

A description of the detailed benefit package for regular employees is available at the Human Resources Office or at our website: (www.gi.alaska.edu/admin/human_resources). Benefits include disability (temporary disability income, long-term survivor income, accidental death and dismemberment); retirement (Teacher's Retirement System (TRS), the Optional Retirement Plan (ORP), Public Employees Retirement System (PERS), UA Pension Plan, tax sheltered annuity plans), and automatic payroll deductions for various benevolent causes. Regular staff employees are entitled to health care benefits provided through the university UA 2000 plan, while represented employees are covered for health care under the university traditional plan. The GeoCare employee

assistance fund is a voluntary program established through the University of Alaska Foundation by GI employees who raise money to finance small grants to coworkers in the case of personal disasters, such as illness, fire, death, etc. Contributions to GeoCare are deductible to the extent of law. For more information, contact the Human Resources Office. All benefits applicable to the regular position will be explained in orientation

6. Time sheets

Time sheets are required to be completed by all employees. They are due every two weeks on payday at the Human Resources Office. Hours turned in each pay period will be paid two weeks later. Hours must be completed for days worked and leave taken. Overtime must be approved by the supervisor. Timesheets are considered legal documents and must be legible and submitted in blue or black ink, signed by the employee and supervisor. Faculty timesheets must be signed by the GI Director.

7. Recruitment, Evaluation, and Termination of Personnel

Hiring, evaluation, and termination procedures for all employees are carried out in accordance with the UA Board of Regents Policy manual or the applicable Collective Bargaining Agreement.

A **position description** must be done for all regular and exempt and non-exempt positions when they are created, often when they are vacated, and when significant changes in responsibilities occur. Position descriptions are coordinated through the Human Resources Office.

Performance evaluations for all non-represented employees shall be performed at least annually in accordance with current university personnel policies and regulations. The Human Resources Office will assist with staff training and completion of the evaluations.

All positions must be advertised, or receive an approval from the HR Office for waiver of advertisement based on special circumstances. Budget approval to fill positions is obtained through the Business Office. The Human Resources Office works with the hiring department on job descriptions, vacancy announcements, and appropriate recruiting methods. Differing paperwork is required depending on type of position. The hiring supervisor or department head may recommend hiring an applicant, but no commitment, either verbal or written, can be made or implied until approval is obtained from the EEO officer and the HR Office. After the selection process has been approved, an employment offer may be made. Please refer to UA Policy and Regulations personnel sections for specific EEO/AA regulations.

Non-retention Employees whose conditions of employment provide that employment is for a specific period or project. Unless your employment is terminated earlier in accordance with Regents' Policy University Regulation, your

employment will continue until the end date, or completion of the project. At that point, employment will end automatically without further notice or obligation on the part of the University, unless a new written employment agreement is entered into.

8. Nonresident Foreign Nationals and Foreign Visitors

The visit of all foreign nationals requires notification of the Director's Office. All nonresident foreign nationals who are staff members or long-term visitors should refer any problems or questions regarding their visas to the Director's Office. Foreign students must contact the Campus International Student Adviser. Prior to inviting a person from a foreign country (whether to be paid or reimbursed by the GI or not), you must contact the Director's Office to obtain information on visa requirements and pertinent restrictions (especially in terms of payment of per diem or fees).

II. ADMINISTRATION

Since 1983, the number of regular staff at the GI has been approximately 200; the annual budget has been $28 million. In FY 1999, the GI operated on a $28 million budget, administering 150 grants/contracts from external agencies, and other state-supported, separately budgeted tasks. The GI operates five self-supporting service centers and annually handles over 400 personnel files and 75 academic files (for evaluation, promotion, tenure, or sabbatical leave), over $13.4 million worth of cost of goods procured, and approximately 1200 travel orders. In coping with the increasing size and complexity of operations, along with the red tape associated with federal and state government requirements, the GI administrators face a substantial challenge.

1. Administrative Structure

The GI organizational structure is summarized on page 6. Institute research is organized into seven disciplines:

- Space Physics;
- Atmospheric Sciences;
- Snow, Ice and Permafrost;
- Seismology;
- Volcanology;
- Tectonics and Sedimentation; and
- Remote Sensing.

Research activities that do not fit into these disciplines or research groups belong to the category of Special Projects under the director's control.

2. The Administrative Team

The Administrative Team consists of the director, 2 associate directors, assistant director of finance, operations manager, human resource manager, and executive officer for administration. The Administrative Team meets weekly to review current and formulate future day-to-day management and administrative actions necessary to support the efficient execution of the Institute's objectives. As deemed necessary or appropriate, the Administrative Team will consult with the members of the Faculty, Staff, and Student Councils in making some of the necessary decisions.

The Director is responsible to the UAF chancellor for the direction of institute administrative and scientific affairs, and for all GI activities and actions that university policy and regulations may require. Within the institute, the director is the final authority for decisions involving budget and personnel actions, including faculty evaluation, promotion, and tenure. The director represents the GI in all relations with the university, the State of Alaska, and outside agencies. The director reviews all research proposals, negotiates with funding agencies, evaluates and oversees fulfillment of grants and contracts, and makes internal allocations of state funds to research projects. The director prepares the GI report to the GI advisory board. The director appoints the associate directors.

The Associate Directors assist the director in matters pertaining to the research discipline groups of the institute. They also work with the director on matters pertaining to faculty hiring, institute relations with the colleges and schools, and their departments, and other issues pertaining to the faculty, graduate students, post-doctoral fellows, research associates, and visiting scientists.

The Assistant Director of Finance is responsible for all business operations of the institute: budgets, accounting, management of grants/contracts, purchasing and property, and travel.

The Operations Manager is responsible for the day-to-day operation of GI facilities, services, and staff: space allocation, keys, telephones, buildings (maintenance, security, and modifications), land and facility acquisition and lease negotiations, health and safety, OSHA compliance, Hazmat compliance, worker's compensation claims, and project engineering. Research support also includes supervision of the Electronics Shop, Computer Resource Center, Digital Design Center, Machine Shop, and High Latitude Monitoring Station (HLMS).

The Human Resources Manager is responsible for management of all HR functions for the GI. The HR Manager serves as an advisor to the GI Director on all HR-related issues. This position provides technical and expertise in areas relating to employee relations, compensation, job evaluation, federal and state wage and hour and employment law, training and development, labor relations and conflict/resolution/mediation. The HR Manager provides program development and adminstration of the HR/Payroll functions

The Executive Officer for Administration is responsible for carrying out administrative tasks necessary for the effective management of the institute by the director, and associate director, and assures that policies developed and decisions made by management are carried out. The supervisor of the Proposal Office reports to the executive officer for administration.

3. The Faculty Council

The Faculty Council is chaired by the director and comprises the group leaders of the scientific research disciplines, the associate directors, geology/geophysics and physics department heads; the ASF director; a graduate student representative, and the executive officer for administration. The faculty council meets monthly (or more often if necessary) and advises the director on matters related to the conduct of science, faculty/PI personnel and budget issues, and the development and implementation of GI policies and appropriate aspects of GI business and operations as they affect the faculty and scientific objectives of the institute. The group leaders shall communicate the council's deliberations and actions to the members of their groups in a timely manner. If a group leader cannot attend a faculty council meeting, the deputy group leader will take his/her place. Extraordinary meetings can be called by the director at the written request of two or more group leaders. Summaries of the meetings will be prepared by the executive officer for administration and disseminated to all council members within a reasonable period of time following each meeting.

4. The GI Staff Council

The GI Staff Council provides a means of communication for the staff of the GI in matters that affect the general welfare of the staff and the institute as a whole. It serves as an informational and participative body to initiate, develop, review and make recommendations regarding issues pertinent to the staff and mission of the GI. The council considers and makes recommendations regarding matters referred to it by the director, by other participative bodies and committees of the Geophysical Institute, or by individuals within the institute. The council participates in periodic reviews of the purpose, mission, goals and objectives of the GI.

The GI Staff Council meets monthly and is comprised of service center supervisors, non-faculty project managers, departmental and other supervisors, and a member from each major administrative subdivision and department of the GI, or their appointee. The council also includes five at-large staff members, elected from and by the staff of the GI. The officers of the GI Staff Council include a president and a recording secretary. More information can be found at http://www.gi.alaska.edu/committees/.

5. The Graduate Student Council

The Graduate Student Council meets to discuss matters of concern to graduate students, their role in achieving the goals of the institute, and their interaction

with faculty and GI support staff. The Graduate Student Council shall communicate the council's deliberations to those concerned (director, faculty councils and committees) in a timely manner. The council representatives assume responsibility for communicating to all students the information and issues brought to them by the management of the Institute, and for responding to requests for student opinion by collecting input from students in all departments. Council meetings are open to all students.

Graduate students are an integral part of the GI, both from the standpoint of their research work and their education. As a university research institute, we are dedicated to the education and mentoring of graduate students. The academic policy is given in the UAF Graduate Manual.

6. The GI Management Group

The GI Management Group consists of the director, the administrative team, and the faculty, staff, and student councils. The group's components interact while carrying out specific administrative tasks and collectively they provide the overall guidance for the Institute's management and operation.

7. Group Leaders

GI faculty are organized into research groups. Group leaders are appointed by the director, in consultation with the faculty members of the group, to renewable two-year terms. The group leaders promote teamwork and conduct regular group meetings to discuss issues of concern to the group. The group leaders are the main constituents of the faculty council and meet monthly with the director and the associate director in the faculty council meeting to discuss group issues and institute-wide issues. The most important functions of the group leaders are (1) to provide organizational leadership, (2) to advise the director on all matters related to scientific research including research personnel decisions, development and implementation of research direction and policy, (3) to inform their groups of the issues discussed in the faculty council meetings, and (4) to discuss group concerns with the director. Each group also selects a deputy group leader to act for the group in the absence of the group leader.

8. Group Membership

A research group comprises all faculty members (active and retired), their graduate students and post-doctoral fellows, as well as research associates and other members of the institute who are actively engaged in research within the discipline. PIs within the group are responsible for leading the research efforts of the group, and are designated as the principal members of the group. The principal members of a group meet at regular intervals, as organized by the group leader, for the purpose of furthering collaborative efforts of the group and to discuss matters of mutual interest. Attendance at and participation in group meetings may be expanded to include others in the group as determined by the principal members of the group. Only regular faculty primarily based in or with joint appointments with the GI are eligible to vote on matters relating to institute-

wide matters as identified by the director, and may vote only as a member of one group.

9. Committees

The director may appoint committees to undertake specific tasks. The charter of each committee shall be defined by the director, to whom the committees report. Committees are dissolved after the assigned tasks have been completed. Nominations for membership on committees will be requested by the director from research groups and/or other units in the GI, depending on the nature of the assigned tasks. The director shall appoint the members and the chair of each committee after taking into consideration all recommendations received.

III. BUSINESS OPERATIONS

1. Purchasing

A purchase may be initiated by any GI staff member using the proper purchase requisition form. The Business Office works with UAF purchasing to procure all goods and services on behalf of the GI. Be sure to allow enough lead time on all purchase requisitions, so that every purchase requisition is not an emergency.

Shipping and Receiving. All items ordered (or partial orders) must be received by the Shipping and Receiving Office so that a receiving report can be forwarded to the Business Office. **Invoices cannot be paid** until the Business Office receives this report.

All purchase requisitions require the signature of the person with spending authority over the account and the Assistant Director of Finance. The director of the GI must also sign all requisitions over $1,000. **After the fact purchase orders are not allowed.** Persons who order by phone or collect goods from vendors without prior written authorization do so at the risk of having to pay for the goods. If you anticipate possible on-site emergency purchases during a field trip, please consult the Business Office for proper procedures. Many problems can be resolved if advance notice is given.

Purchases over $5,000 require that price quotes from at least three different vendors be attached to the requisition. UAF purchasing will obtain those quotes. You may speed the process up by providing names and phone numbers of likely vendors for your purchase. Sole-source procurement is not permissible unless a requirement is available from only a single supplier. Any sole-source requisition over $5,000 must be processed with a written justification as to why no other source is suitable or acceptable to meet the need. Price reasonableness must also be shown based on a published price list or other acceptable means.

Purchases over $25,000 for equipment, supplies, services, or materials by state law require **competitive bidding.** Exceptions to this regulation are rarely

permitted; they require a sole-source justification that must be convincing and legitimate within the intent of the law. PIs, section supervisors, etc., must work with the Business Office in preparing the technical aspects of bid specifications. Note that the procedure of competitive bidding usually takes **several weeks;** expensive items cannot be purchased quickly.

2. Foreign and U.S. Customs

Assistance with all customs matters is provided by the Property Office, which initiates all importing or exporting of equipment, supplies, or materials. Rigid rules and guidelines must be followed to comply with U.S. Customs and Department of Commerce regulations. Points to remember when traveling abroad or for any transactions you may have with foreign entities: **custom duties** must be allowed for in budgets (in some instances, the use of a customs broker is necessary); **foreign manufactured equipment** must be registered by U.S. Customs before departing the United States; applications for duty-free entry of scientific instruments requires substantial lead time; plan accordingly; **export licensing** must be secured before some equipment (controlled commodities) can be exported from the U.S., this will take a minimum of eight weeks.

3. Work Authorization

A work authorization, also known as a work order, may be initiated by any staff member or from outside the institute to purchase services from a GI service center. Forms are available at the Business Office.

An approved work authorization form with a work order number assigned by the Business Office must be completed before any work on a project begins by a service center. Work authorizations may be required for work on specific projects by support staff not assigned to service centers. **A standing work authorization** may be established in certain circumstances where services repeatedly are required. Consult the Business Office.

4. Travel

UA travel policies and regulations are available in the Business Office and on the web at (www.alaska.edu/bor/regulation/5r/r05-02-06.html). **Travel Authorization:** A travel authorization form is required for all travel. This form is required even if no expenses are expected to be incurred. The form verifies that your trip is authorized; it is necessary for UA travel insurance coverage. The traveler, traveler's supervisor and Director must sign the form. Please allow several days for the processing of the Travel Authorization. Once the ink copy of your Travel Authorization is returned to you, your travel is approved and you can make your travel arrangements.

Airline Tickets: You can contact the vendor of your choice requesting the most economical price and most direct routing. The University will not pay for First Class or Business Class. You can then have the vendor email the travel office for payment. The travel office has s credit card for payment of your tickets. If you

make your arrangements through a travel website, put your reservation on hold and email the confirmation number to the travel office for payment. Once your tickets have been paid, the Travel Office will contact you when your tickets arrive or will email you back with your paid confirmation if made through a travel website. If you choose to use your personal credit card for payment of your tickets, you will not be reimbursed until you return from your trip.

Hotel/Lodging: There are specific lodging rates for all cities. Please contact the travel office or look on the website to obtain these rates. Rates listed do not include taxes. If your lodging rates are 1.5 times higher than the listed rates (not including taxes) you must submit a request in writing as to the reason for the need of the higher lodging rate. Approval will be made by the Travel Administrator. Approval must be given prior to incurring the higher cost. If you stay with relatives or friends rather than staying at a hotel, you may claim 15% of hotel rate per day as your lodging expenses.

Per Diem: Rates for meals and lodging can be obtained from the website or the travel office.
Domestic per diem rates:
http://www.policyworks.gov/org/main/mt/homepage/mtt/perdiem/perd03d.html

Hawaii and foreign per diem rates
http://www.state.gov/m/a/als/prdm/

Alaska per diem rates: Please contact the travel office.

Car Rental: All car rentals must be approved prior to travel. The University is self-insured and the insurance offered by the vendor must be declined. An intermediate size car is the largest you can rent without prior approval. If you need a larger car or a four-wheel drive (necessary for business) please obtain prior approval. If you are a driver under the age of 25 please contact the travel office prior to renting.

Conference registration: Registration can be paid by using the Pro-card or by Purchase Order (in the Business Office). If you choose to use your personal credit card to pay for your registration, you can only be reimbursed when you return from your trip.

Travel Advances: Students and non-salaried employees may request a cash advance. Travel advances will be issued 5 business days prior to travel. Travel advances can be issued for 80% of your total expenses (less airfare).

American Express Cards: Faculty and frequent business travelers can apply for this card. It can be used to pay for all university travel expenses as well as to get cash advances. The traveler is personally liable for all charges to the account. Contact the travel office for further information on obtaining a card.

Travel Insurance: Group travel accident insurance up to $100,000 for each employee is provided while traveling on university business. Non-employees traveling on university business are not covered. Additional coverage for hazardous duty is available at an additional cost. The travel office can help you obtain this coverage.

Foreign Travel: There are some very strict guidelines regarding the "Fly America Act." If you are traveling to a foreign country please make sure you are following these guidelines. If you need further assistance in understanding the rules please contact the travel office.

Travel Expenses: Expenses are reimbursed in accordance with University Policy. Travel expense reports must be completed and turned into the travel office within 15 days from your return. Original receipts, passenger receipts and boarding passes must be attached. All expenses claimed over $25.00 must have an original receipt attached. There is an online version of the expense report on the GI website: http://www.gi.alaska.edu/admin/business/travel.html

This is a brief explanation of the Travel Regulations and Policies. A complete copy of the University Regulations can be obtained from the website or the travel office. www.alaska.edu/bor/regulation/5r/r05-02-06.html .

If you have a unique or unusual situation, it is best to get approval before you leave. If you had unusual circumstances arise during your trip please explain it in a memo form and attached it to the expense report. Please provide your business extension on your expense report so you can be contacted for any questions the travel office may have.

5. Property Control

Use of equipment is restricted to work-related matters. For all property/equipment matters, refer to the GI Property Manual or contact the Property Office before taking any action.

Equipment records are maintained and updated by the Property Office for all equipment owned by the GI and equipment the GI is accountable for to government agencies, other institutions, private organizations, etc. Items designated equipment are tagged with a GI numerical property tag and tracked for the equipment's life. To ensure accurate records, you must notify the Property Office any time equipment is moved or relocated to another office, laboratory, or field site for an extended period or permanently.

Equipment transfers between departments or outside organizations must be approved by the director and business manager; properly completed forms must be submitted to the Property Office before any equipment is moved. This procedure also applies to extended off-campus use of equipment (i.e., at home, sabbatical leave, etc.).

IV. SUPPORT SERVICES

To support research and other operations, the GI maintains an array of institutional services organized either as offices or self-supporting service centers. The five technical service centers at the GI are the Computer Resource Center, Electronics Shop, Machine Shop, Digital Design Center, and the Proposal Office. Because they are self-supporting, each must recover all operating costs incurred through charges assessed monthly. Operating costs include salaries, benefits, supplies, equipment, and training and service center hourly rates are set accordingly. To contract for work by a service center, a signed work authorization form is needed. For more information about available services, contact the service center supervisors or the Operations Office. Current service center rates can be viewed at: http://www.gi.alaska.edu/admin/business/

1. Human Resources Office

The GI Human Resources Office provides assistance to all GI employees, supervisors, and administration on accepted personnel management practices, UA personnel policies and regulations, collective bargaining agreements, payroll, and state and federal employment laws. The GI Human Resources Office oversees the administration of the UA benefit package for covered GI employees. The Human Resources Office is the source for all employment related forms and advice in preparing recruitment, appraisal or benefit forms and official personnel files for GI employees. All initial hires are given an orientation by the Human Resources Office. Employees with questions regarding any aspect of their employment should contact the Human Resources Office for further information.

2. Business Office

The Business Office provides a complete range of financial services to meet the varying needs of its research faculty and support staff. An able staff carries out all business operations related to accounting, grants/contracts administration, purchasing, billing, inventory, and travel. The Business Office is organized to assist the research staff with proposal budget preparation and all routine administrative and fiscal operations related to their projects. It should be noted that the best service can be provided to those who practice the timely delivery of prepared proposals, reports to agencies, purchase and travel orders, et cetera. Commonly used business forms are available in racks outside the entry to the Business Office on the 6th Floor.

3. Operations Office

The Operations Office is responsible for the day-to-day operation of GI facilities, services, and staff: space allocation, vehicle fleet, keys, telephones, buildings and field sites (maintenance, security, and modifications), land and facility acquisition and lease negotiations, health and safety, OSHA compliance, Hazmat compliance, and worker's compensation questions and claims. In-house engineering services are available through referral by this office. Operations also coordinates technical and engineering matters with other research organizations and government agencies. The assistant operations manager is the GI Training Coordinator,

responsible for organizing and facilitating training seminars, workshops and maintaining an interactive audio and videotape library in collaboration with the HR Office. Policy details are found in the separate sections below.

4. Information and Education Outreach Office

The Information Office provides news, editorial, and publication services to the GI administrative offices and PIs. The staff is responsible for news and media relations, educational outreach, public relations assistance and projects, institute publications, preparing proposals for funding and compiling information on the GI for dissemination to the UAF and UA offices, government agencies, etc.

5. Keith B. Mather Library

The Keith B. Mather Library is the research support library for the Geophysical Institute and is located in the IARC building. Hours are from 8 am to 5 p.m., Monday through Friday. During this period please have the library personnel check out all books. All members of the institute may request the access code or Polar Express Card for the door lock so that the library can be used at any time. Users of the library are obligated to maintain the confidentiality of the access code. The method of checking out books during off hours is posted at the front desk.

The library contains approximately 48,000 volumes of specialized books and periodicals for research conducted in the GI and IARC. All books are arranged alphabetically by the Library of Congress classification. Periodicals are arranged alphabetically by the title on the cover. All periodicals from 1980 forward are located on the main floor of the library, while periodicals before 1980 are located on the lower level.

All faculty, staff and graduate students will need a Polar Express card to check out library materials. The card can be obtained from the Polar Express office on lower campus. This card entitles the holder to check out materials at the GI, the Rasmussen Library, and the Biosciences Library. Books are checked out for the current semester, and must be returned or renewed at the end of each semester. If a book you need is checked out, notify the library and they will recall it. Periodicals (journals, bound or unbound) are a most important part of this scientific collection. Unlike books, periodicals cannot be checked out.

To copy material from books and periodicals, copy machines are available on both floors of the library. The cost can be charged to valid institute accounts in the log notebook at each copier. Photocopying is subject to copyright restrictions posted near the copier. The user is obligated to adhere to those restrictions.

The Interlibrary Loan system can be used to borrow materials from other libraries. Request forms are located on the front desk and on the library webpage.

Book acquisitions are recommended to the librarian routinely by members of the GI Library Committee. However, every member of the GI is encouraged to make recommendations for books and journals.

6. GeoData Center

The UAF-GI GeoData Center (GDC) is a public facility for aerial photography, satellite imagery and many other geophysical data collections.

The GDC provides data management, archive, and user services for a wide variety of geophysical data collections of local, regional, national and international interest. The community currently supported by the GDC includes the research community, government agencies at all levels, and the general public. As a part of the services provided, the GeoData Center maintains close working relationships with other data sources within the private and government sectors, such as the Earth Resource Orbiting Satellite (EROS) Data Center in Sioux Falls, South Dakota and Aeromap U.S., Inc. in Anchorage, Alaska.

Historic aerial, NOAA/AVHRR, Landsat, ERS-1 Synthetic Aperture Radar (SAR) and JERS1 SAR imagery of the State of Alaska and its surrounding regions comprise the bulk of the GeoData Center archives. A wide variety of smaller geophysical collections (e.g., riometry, earth current and magnetometry data from several regional sites) are available as well. 1:250,000 and 1:63,360 scale maps of the majority of the state are available for browse purposes.

7. Earth Science Information Center (ESIC) Map Office

The USGS national Mapping Division announced that it would close the Fairbanks Earth Science Information Center located in the Federal Building in February 1995. As a courtesy to the local community, the GI agreed to assume the Map Office sales functions. Eighty-five percent of customers come from the general public who use maps for outdoor recreation or business. The office sells maps of states, British Columbia, trails, and geologic and nautical charts in both paper and CD-ROM form. Over 3,500 different map products are stocked and in 1999, $105,000 in sales was recorded.

8. Computer Resource Center

The Computer Resource Center (CRC) is a recharge service center with a mission of providing coordinated, efficient, and effective computing, communication, and information management services that are of general value to the institute. Specifically, it exists to meet the computing technology needs of its GI and IARC clients, enabling them to fulfill their scientific research and operational goals. Its services include a wide range of information technology. It manages and maintains the GI and IARC networks of more than 800 computers. It manages and coordinates network and system security implementation and incident response. It procures, maintains and repairs PC, Mac and workstation hardware and software and serves as UAF's Apple warranty repair center. It manages,

maintains and administers a wide variety of clients' computer systems. It analyzes, specifies, designs and implements information system solutions to meet clients' project needs from Web site development, to database programming, to super-computer-based numerical analysis for scientific applications. It also provides dial-in network access, data backup services for desktop systems, CD and DVD production and training and stocks common PC supplies. CRC services are also available to clients outside the GI and IARC on a work order basis.

9. Electronics Shop

The Electronics Shop has extensive experience with a wide variety of scientific and technical instruments, including data acquisition systems, solar powered systems, computer networks (including wireless and fiber optic), satellite tracking and downlink facilities, strong motion and broadband seismic systems, magnetometer and GPS instruments and web based instrumentation systems.

In addition, shop personnel can perform services such as circuit design of analog, digital and microprocessor-based systems, printed circuit board design. (CAD based), software development for embedded systems and Digital Signal Processing, computer network topology design, installation and operation of a remotely controlled submersible vehicle, and installation and maintenance of instrument systems (including remote field expeditions).

10. Machine Shop

This service center specializes in the design, engineering and fabrication of mechanical equipment for scientific applications. The shop is well equipped with state-of-the-art computerized three-axis and four-axis milling machines as well as all standard machine tools. Other equipment includes a complete welding shop, carpentry shop, metal heating-treating and aluminum anodizing capabilities. Staff skills include engineering support, precision machining and fabrication, MIG, TIG, and stick welding, rough and finish carpentry and fine cabinetry. The general labor, expediting, shipping and receiving services for the institute are also provided. The GI vehicle fleet is managed by the Machine Shop (report vehicle problems to the supervisor).

11. Digital Design Center

The Digital Design Center provides custom graphic art, web design and photographic services to the Geophysical Institute and other clients. Services offered include: Graphic art and design, digital art for multimedia production, scientific illustration, publication and CD design, studio and on-site digital and film photography, slide production (this includes slides from digital files). Web site and page design, production, and maintenance is also offered. In addition, the Digital Design Center offers XML/XSL and CGI programming, animation, high resolution and large format scanning, large format inkjet printing, archival printing, and mounting, framing and display production.

A professional staff is available with access to the latest graphics, web authoring and output software, on Macintosh, PC and UNIX computing platforms, and a wide range of digital input and output devices is available.

12. Proposal Office

This service center is responsible for typing technical proposals, manuscripts, reports, articles, and general correspondence. All proposals are reviewed, edited, finalized, and forwarded to the agencies by the Proposal Office. The Proposal Office also scans optical and graphic data and converts documents typed to disk by PIs and others. Postal, photocopying and FAX services are also located in this office.

13. Communications Services

Facsimile (FAX): (907) 474-7290. The GI FAX machine is located in the Word Processing Center area (Room 614). A FaxTrak System is installed on the FAX which accounts for all calls. An I.D. number must be inserted, in order for the system to work. Please get your I.D. number from the mail clerk.

Telephone Policy: All requests for telephone installation and repair must be processed through the Operations Office.

Full-time regular faculty, research assistants, post docs and staff will be assigned one phone. Temporary employees and visiting scientists will be addressed on a case-by-case basis. Graduate students will be assigned one phone per office area.

Undergraduate students, temporary employees, and volunteers normally will not be assigned a phone.

Photocopying: The main copy machines are located in the Proposal Office area (Room 614). A CopyTrak System is installed on these machines and accounts for all copies made. An I.D. number must be inserted, in order for these machines to work. Please get your I.D. number from the mail clerk. Your number works for both the FAX and copy machines. Photocopying is subject to copyright restrictions posted near each machine. The user is obligated to adhere to those restrictions.

Mail: Postal services are managed by the Proposal Office, Room 614. All personnel are assigned mailboxes, with the exception of student assistants who utilize their supervisor's box. Your GI mailbox should not be used to receive private mail unless you are a short-term visitor or, as a new employee will use it only for a short time. Mail is delivered and distributed daily, usually by 2:30 p.m. Outgoing mail is collected in baskets as: mail with postage, institute mail needing postage, and campus mail. Federal Express, DHL, UPS, etc., is delivered to the expediter (Room 109). Registered, certified and express mail is delivered to the mail room, signed for and relinquished to the appropriate recipient. (Room 614).

Network Connections: The GI is connected to all statewide and worldwide networks including Internet. Please see the Computer Resource Center for further information.

Computer Mail: All questions regarding communications by computer, in-house, on campus, or through other networks should be referred to the Computer Resource Center.

14. **University Vehicles** The GI operates a fleet of vehicles that is available for scientific projects and administrative purposes. Effective March 31, 2001, you must have completed the UAF Driver Safety Class. Using these vehicles for private purposes is prohibited. You must hold a valid vehicle operator license to drive GI vehicles. Vehicle check-out policy and procedures are posted next to the locked vehicle key cabinet located on the first floor directly across from the elevators. **This cabinet is accessible with a main building key.**

    Servicing and maintenance of the vehicles is performed in-house by the Machine Shop. Drivers should note on the log sheet (provided next to the vehicle cabinet) any defects in the vehicles, and immediately report any serious defects or damage to the machine shop supervisor.

    Charges are based on mileage driven. Contact the GI Business Office to determine what the current per mile rate is. North Slope haul road (Yukon River to Prudhoe Bay) mileage is billed at double the standard rate. Vehicle logs should include the date a vehicle is checked out, name of user, beginning and ending odometer readings, number of miles driven, billing code name or account, location(s) driven to, and purchase of gas or other maintenance items necessary for vehicle operation.

    Accidents: If a GI/UAF vehicle is involved in an accident, the driver should obtain the name, address, telephone number, and driver's license of other driver(s) involved, plus a vehicle description and license tag number. If possible, obtain names and addresses of any witnesses. The vehicle registration, a University of Alaska Auto Accident Damage Claim Form, and instruction sheet are in the glove compartment of each GI vehicle. Notify UAF Police Department (7721) and the Operations Office (7291) of all GI/UAF vehicle accidents. If there is an injury, or total property damage is $500.00 or more, immediately contact the local police department or Alaska State Troopers (**call 911**). If the accident was not investigated by a police officer, you must file a written report of the accident to the Department of Public Safety, Division of Motor Vehicles within 10 days (this is state law). If you are injured, a Worker's Compensation Form obtained from the Operations Office must be filled out by you and your supervisor within 10 days of GI's knowledge of the injury. In the event of a fatality or overnight hospitalization as a result of the accident, the accident must be reported immediately but no later than 24 hours after receipt by the GI of information that the accident has occurred.

During cold weather (below -30F/-37C), drivers making long trips through sparsely populated country must be accompanied by at least one other person and emergency equipment should be taken. The itinerary and estimated time of return should be reported to operations before commencing on the trip. Special kits are also available from the Machine Shop for North Slope road trips.

V. HEALTH AND SAFETY

1. Emergencies

For any life-threatening emergency, including fire, first call 911 from the nearest phone, which will notify UAF Police and Fire Departments, (Note that fire alarm pull boxes are located throughout the building.) then contact the Operations Office.

The Operations Office is responsible for all emergencies involving the building, equipment, or materials problems, and Worker's Compensation questions, claims, etc.

For emergencies at field sites, notify the operations manager if possible, or the director. Notify the station manager at all military controlled field sites.

2. Accidents and Safety Threats

Adoption of safe procedures is the individual responsibility of each employee. Supervisors should monitor the safe working conditions of their sections. The University Safety Handbook is available from the Operations Office.

3. Hazardous Materials

Dangers of personal injury and contamination make it necessary for everyone at the GI to learn the proper response to any chemical spill, as well as procedures for ordering, storing, and using any hazardous chemicals in the work setting.

To order a chemical or other hazardous material, or one that requires special handling or labeling, you must indicate the material's status on the purchase order/requisition. If you are unsure of its status, you must find out by contacting the Operations Office. For more information contact the Operations Office or the property officer, who is located in the Business Office at 7291 or Safety Services at 5413.

Storage: Hazardous materials must be stored in a safe and secure location. A chemical inventory must be completed once a year and turned in to the Operations Office. All hazardous materials (chemicals), must have a Material Safety Data Sheet (MSDS) located in the lab where the chemical is used. A MSDS master list is located in the Operations Office, Room 616.

Spills: do not attempt to clean up a chemical spill. Remain calm and leave the area, closing it off if possible. **Call 911**, and inform them of your condition and location; seek medical attention if needed; write down as many facts as possible: spill location, room number, size and/or quantity, substance name. Contact the Operations Office (7291, 7292). Do not re-enter the area unless a fire department official or a UAF official directs you to do so.

4. Police and Law

Incidents in which violation of a law is suspected should be reported immediately to the operations manager or assistant. The Operations Office is the GI liaison with the Fairbanks Police Department, Alaska State Troopers, UAF Police Department, and the FBI. This includes suspected cases of theft, unauthorized entry, unauthorized use of vehicles or equipment, damage to federal or state property, etc. **If the Operations or Director's Office can't be reached, call 911.**

5. Smoking

The Elvey Building is a smoke free building. Smoking is prohibited in University of Alaska Buildings including all nonresidential university facilities open to the public and all public areas of all residential university facilities. Report smoking violations to the UAF Police Department at 5413.

VI. ELVEY BUILDING FACILITIES

1. Office Allocation

The Operations Office must be notified well in advance of the arrival of any new employee to facilitate office allocation. All space allocations for research groups are discussed with the group leaders. All space allocations for research support staff are discussed with supervisors and the operations manager. Final decisions on allocation or reallocation are made by the director.

The following conditions apply to space allocations in the Elvey Building:

- A contemplated move, invitation of visitors, or other action requiring space allocation or reallocation of scientific staff must first be discussed with the cognizant group leader.
- Each regular faculty member is entitled to occupy a standard sized office.
- Post docs will share an office.
- Each regular staff employee is entitled to shared office space
- At least three graduate students will share a standard-size office.
- Retired faculty will share an office.
- Undergraduate students will be accommodated as space is available.
- Faculty members leaving on 6-12 month sabbaticals or special assignments. must prepare their office for temporary use during their absence.

Any office or lab space not used for extended periods of time (more than 3 months) may be reassigned during the period of inactivity (e.g., a sabbatical

leave of the tenant) or permanently (e.g., when a project using the lab has terminated).

A short- or long-term visitor (e.g., a sabbatical visitor) invited by a faculty member must share the office or laboratory space of the inviter.

Due to the extreme shortage of space in the Elvey building every effort will be made to use all available space in the most efficient way possible.

2. Key Policy

The Operations Office manages key issuance daily between 8-12 and 1-4:30 p.m. for the Geophysical Institute, including the Elvey Building, off-site leased space, and field sites. The Elvey Building is open from 8:00 am until 5:30 p.m., Monday through Friday. It is locked from 5:30 p.m. through 7:30 a.m., Monday through Friday, and all day on weekends and holidays. Front door keys are issued only when an employee is expected to work outside the 8a.m. to 5p.m. normal working hours, Monday through Friday. A $20 per key deposit is required from all temporary employees, undergraduate student hires, and non-GI staff and non-GI graduate students. The deposit must be made by cash or check. Keys will be issued to non-GI UAF staff only if appropriately authorized, either by the Operations Office or a GI affiliate, for official use only. There is a $20 per key fee for lost keys.

3. Meeting Rooms and Scheduling

The Operations Office handles room scheduling for classes, seminars, meetings, and other special events, as well as reservations for audio-visual equipment. Please call **-7243** for assistance.

Individuals reserving a meeting room must be associated with the GI or involved in UA-related research. Non-institute users or GI personnel using rooms after business hours must fill out a room-reservation form designating the person responsible for the room's condition and securing the front doors of the building. Non-institute users must also fill out a work order to cover any cost associated with room preparation, audio-visual assistance, clean-up or damage. The work order will be canceled if these services are not necessary. Room reservations by non-institute users normally will not be accepted more than 30 days in advance.

VII. FIELD SITES

Contact the Operations Office to use or obtain information on, or establish a new field site. The Operations Office will make the necessary arrangements. Field site visitations on military sites must be cleared by the Operations Office.

1. Site Locations

GI operates an array of permanent or long-term field stations and observatories, along with temporary sites set up for short-term campaign purposes. Much

seismology, magnetic, and auroral observing equipment is located at field sites throughout Alaska and northwestern Canada; most sites involve continuously operating, unmanned observing stations. The Alaska-Canada High Latitude Magnetic Chain of Stations is a series of magnetometers following a longitudinal line from Talkeetna, Alaska to Eureka, NWT, Canada. Information from the chain is transmitted via satellite to the World Data Center. A digital ionospheric sounding system at the Sheep Creek site is operated by the Air Force Air Weather Service. The High Latitude Monitoring Station (HLMS) at Elmendorf AFB, Anchorage, monitors the earth's ionospheric environment, gathering "high latitude data" using magnetometers, riometers, a polarimeter, and an Auroral Radar System.

2. Poker Flat Research Range (PFRR)

This research rocket launch facility and observatory, owned and operated by the GI, is the largest land-based research rocket range in the world and the only high-latitude range in the United States. Since it was founded 34 years ago, more than 1,500 meteorological rockets and approximately 300 major high-altitude sounding rocket experiments have been launched from Poker Flat Research Range to conduct atmospheric research on diverse subjects including the aurora, the ozone layer, solar protons and electric, magnetic, and ultraviolet fields. PFRR is located near Fairbanks at 30 Mile Steese Highway. The GI operates major ground support and observational facilities at Poker Flat. Range operations are funded by NASA. The range manager reports to the institute director and is responsible for maintenance and operation, contacts with supporting agencies (NASA, AFGI, etc.), budget, launch scheduling and coordination with PFRR users, and local safety and security (including contacts with FAA and NORAD).

3. Optical Observatories

The main GI optical observatory is at Poker Flat, and the GI participates in an observatory at Svalbard, Norway. Observations using satellite communications are made from unmanned all-sky cameras located at remote sites in Alaska and Canada. Downrange observation sites for Poker Flat are at Fort Yukon, Kotzebue, Arctic Village and Kaktovik (Barter Island). A light detection and ranging (LIDAR) facility is also located at the Poker Flat as part of a joint project with Nagoya University of Japan.

VIII. OTHER FACILITIES AND PROGRAMS

1. Alaska Synthetic Aperture Radar Facility (ASF)

The Geophysical Institute operates ASF through funding on the behalf of NASA. ASF presently receives signal data from synthetic aperture radar (SAR) instruments aboard four international SAR satellites for the scientific and research community. Signal data is received from two locations, one antenna dish on the Elvey Building and a larger one in the UAF campground. The data is then

processed into image form and made available for distribution to approved scientific and applications users via an electronic, online archive.

ASF also operates a derived products system for routine automated extraction of higher level data from SAR images. The system currently provides sea ice classifications and sea ice motion vectors, and ocean wave spectra. Other examples of ASF projects include maps of Antarctica and Boreal forest plus the first map of the Amazon rain forest.

ASF is one of eight NASA Distributed Active Archive Centers (DAACs). These centers are part of the EOS (Earth Observing System) Data and Information System (EOSDIS). However, ASF differs from most DAAC's in that it receives raw data directly from the satellites.

ASF provides an important link to the IARC (International Arctic Research Center) and ARSC (Arctic Region Supercomputing Center) for remote sensing data and expertise. (Plans are underway to implement an ADEOS II processing center within the IARC).

2. Alaska Data Visualization and Analysis Laboratory (ADVAL)

ADVAL is the University of Alaska Fairbanks' digital image processing and geographic information system (GIS) laboratory. ADVAL is housed in the Geophysical Institute and administered through the Office of Arctic Research and the Center for Global Change and Arctic System Research. ADVAL provides hardware, software and technical consulting for remote sensing/image processing, GIS and data visualization in support of education and research. Faculty, staff, students and the public have access to ADVAL's resources.

ADVAL supports projects that focus on investigation of high-latitude and circumpolar issues addressing renewable and non-renewable resources on land and sea, global change, atmospheric science, oceanography, glaciers and sea ice, spatial modeling, volcanology and arctic environmental questions.

A Tera-Scan satellite receiving station, which allows real-time reception, processing and archiving of AVHRR, DMSP, TOVS, and Argos data, also resides in ADVAL. The ADVAL server is the host for a comprehensive on-line browse collection of AVHRR data over the Arctic, Alaska, eastern and central Russia and western Canada.

3. Data Analysis Center

The Data Analysis Center is located on the seventh floor of the Elvey Building. The center currently is equipped with a Sun Sparcstation, four DEC AXP workstations, and color X-Window terminals. Additional equipment consists of printers for producing black and white and color hard copies, optical disk drives, and assorted magnetic tape drives for reading from or writing to 4-8mm, and 9-

track media. The facilities are readily available for research use by faculty and students.

4. **Alaska Volcano Observatory (AVO)**
Located at the seismology lab, this cooperative program involves the GI, the Alaska Division of Geological and Geophysical Surveys and the U.S. Geological Survey. The AVO links laboratories in Alaska, Washington and California by computer to monitor hazardous Alaskan volcanoes and to conduct cooperative research. The AVO also provides public safety information to the Federal Aviation Administration, NOAA, the Alaska Division of Emergency Services, municipal governments and the public.

5. **Alaska Earthquake Information Center (AEIC)**
Monitoring earthquake activity and providing information to the public about earthquake hazards, the AEIC is a cooperative program with the USGS. The network of 300 seismographs operated by the seismology lab includes stations of the GI, the USGS and NOAA's Alaska Tsunami Warning Center. The office of the Alaska state seismologist is located at the laboratory, which also supports research applied to mitigating earthquakes, tsunami and volcano hazards, as well as basic research on tectonic processes.

6. **Geochronology Laboratory**
The UAF Geochronology Laboratory, housed in the Natural Sciences Facility, is equipped with two mass spectrometers for the measurement of argon isotopes. The primary functions of the laboratory are the determination of ages of rocks and minerals using the argon-argon dating method and the investigation of the dynamics of the argon isotopic system in silicate minerals. This laboratory is supported by a cooperative research program involving the Geophysical Institute, the Alaska Division of Geological and Geophysical surveys, the U.S. Geological Survey and petroleum and mining companies. The laboratory also provides analyses for researchers at other universities through collaborative efforts. Facilities for preparing samples for geochronologic, paleomagnetic and geochemical studies are also available. One PI, a full-time staff member and students are involved in sample preparation and analysis.

7. **Paleomagnetism and Tectonics Laboratory**
This laboratory located in the Natural Sciences Building, is equipped with a 2-G superconducting magnetometer and ancillary equipment for paleomagnetic studies. These include rock drills, saws and corers suitable for both hard rocks and soft sediments. The laboratory is set up to determine the natural magnetization of samples collected, which in turn can give a measure of the magnetic field around the sample when they formed. The earth's magnetic field can be used to track tectonic (plate) motions. Other uses include investigating how the earth's magnetic field changes through time.

8. Snow, Ice, and Permafrost Laboratories

The GI houses three ice laboratories/cold rooms for permafrost studies, ice core analysis, glaciological studies, and other research requiring simulated cold environments.

9. Atmospheric Sciences Laboratories

Faculty, staff and students associated with the GI's Atmospheric Science Group reside primarily in the IARC building. Laboratory and computer facilities for the group, including laboratories suitable for atmospheric chemistry, optics, radiative transfer, and aerosol studies (as well as other observationally based studies) are housed on the 3rd floor of IARC, as is the local forecast office for the National Weather Service and the UAF Center for Global Change. Faculty, staff and students that are jointly associated with the IARC Frontier Program are housed on the 4th floor of IARC. The group, through a variety of funded programs, maintains observational sites at Ester Dome, Poker Flat, Barrow, Antarctica and several other sites in the Fairbanks area, including the rooftop area of the IARC building.

10. Alaska Climate Research Center

This organization concentrates on research of Alaska climatology and climatic trends and on answering requests for climatic data and working closely with the UAA Climate Center.

IX. PRIVATE USES AND RIGHTS

1. Private Use of University of Alaska Facilities

The use of university facilities for personal purposes is prohibited by University of Alaska regulations, Geophysical Institute policy, and state law. This includes building space, GI/UAF vehicles, shops, computers or word processing equipment, scientific instruments and GI VAX accounts.

Some services (photocopying or via work order) are available for private use at stipulated cost, providing such use does not interfere with the officially assigned functions of the service. Reservations for private travel will not be handled by the Business Office. Personal long-distance calls must be reimbursed by the individual when billed.

Do not give the GI as an address for private mail (boxes can be rented from the local U.S. Post Office). Exceptions are made for new employees arriving from out-of-town during the first few months of their residence and for temporary visitors.

2. Patents and Consulting

Regulated by UA Regents' Policy, a copy of the complete policy and regulations manual is available in the Human Resources Office or at http://www.alaska.edu/bor/contents/pt4.html.

3. Proprietary Rights of Computer Software

It is GI policy and federal copyright law that commercial computer software, on which the copyright is not held by the institute, shall not be copied for uses beyond those permitted by the copyright holder. Until UA rules differently, the following shall also apply, and cases in doubt will be resolved by the director.

1. Computer software developed using funds from the GI state appropriation is the property of the GI.

2. Ownership of software developed under a grant or contract is defined in, or shall be interpreted from, the grant or contract conditions.

3. Programs specific to a thesis or a given research program (e.g., numerical simulations of a given process, numerical integration of a given set of equations, a given quantitative model, etc.) may remain protected for exclusive use by the GI, except as stipulated by a grant or contract.

X. CONTACTS OUTSIDE THE INSTITUTE

1. Introduction: Rights and Responsibilities

The university is dedicated to providing the environment of free and honest inquiry essential to its functioning (Regents' Policy 04.08.01) and adheres to the principle of academic freedom. However, each of us is well-served by remembering that while freedoms are rights, they are not licenses, and they carry with them responsibilities. The First Amendment guarantees the individual freedom to publicly state whatever one wants, provided the statement is compatible with local laws relating to decency, libel and slander. You are free to inform the audience or readership whatever you wish about yourself and your affiliation. But remember that when you write or speak specifically on behalf of the GI by using the bylines of the institute in the letterhead or announcement, under the title or under your signature, or being filmed in the GI building or on GI grounds, a partnership is established between you and the GI in which opinions, responsibilities, and commitments are shared. This applies especially to your contacts with the news media and the political establishment.

2. Use of GI Stationary

GI stationery is provided to staff members for communication on professional matters of specific incumbency of the author (his or her research, committee business, grants and contracts business, academic activity, or administrative business). Under no circumstances should statements be made in writing that could be construed by the reader as implying a financial commitment by the GI that is not covered by an approved budget or plan, or as representing an opinion of the institute that is not part of officially approved policy.

3. Copies of correspondence

The Director's Office shall receive copies of correspondence, including E-mail, regarding GI business, except for the individual professional business of the author.

4. Contacts with News Media Representatives

News releases: GI news releases are prepared by the GI Information and Education Outreach Office and forwarded to the University Relations Office. Faculty and staff are asked to keep the Information Office informed of developments that might be of interest to the public, and are invited to suggest story ideas. Media organizations also receive copies of the GI newsletter, the "GI Quarterly." A clipping service provides copies of research and GI news coverage that appears in all Alaskan newspapers. These clippings can be reviewed in the Information and Educational Outreach Office.

Unsolicited media contacts: While you are requested not to submit written news directly to a media organization, media representatives frequently contact PIs and other staff directly for clarification of scientific questions or details of GI-related events. Your careful cooperation with reporters on these occasions is an asset to the institute. An effort must be made to assure that GI work and personnel are properly credited in all news stories. Refer questions you can't answer or feel uncomfortable answering to the Information and Educational Outreach Office.

Requests for interviews, testimony, and articles that concern GI business should be discussed with the director or Associate director, such that a coherent policy is presented to outside agencies and the public.

Reporters may misconstrue, misunderstand, or misquote you for various reasons-deadline pressure, inexperience or lack of science background, etc. Although reporters usually won't have you read a story before it's printed, you can ask reporters to repeat to you their understanding of your comments. It is wise to exercise restraint, particularly when asked to make individual public statements on some emotional or politically sensitive subject, such as environmental control, etc.

5. Contacts with Legislators and Government Officials

Contacts between GI staff and government officials concerning university programs, the budget, etc., are encouraged, but they require great responsibility and care on your part. Pending specific instructions in writing from the UA or UAF administration, the following guidelines apply for GI staff interactions with state legislators, legislative staff, the Governor's Office, state agencies, congressional members and staff, and representatives of the federal government or government agencies.

You may discuss orally any matters concerning the GI and its activities. However, do not make any oral commitments involving staff time, financial

resources, GI policy, etc., unless they are first cleared with the Director's Office. When you speak as a university employee, make no statements in favor of a political candidate, party, or partisan issue; if in doubt about this, please consult the Director's Office.

Correspondence with state or federal officials on behalf of the GI (e.g., on GI stationery or signed as a GI employee) is restricted to professional matters of specific incumbency of the author. Under no circumstances should statements be made in writing which could be construed as implying a commitment by the GI not covered by an approved plan or budget or representing an opinion of the GI that is not part of its official policy.

Disputes or serious disagreements concerning GI matters with any official of the university, government or a private institution must be reported immediately to the Director's Office. When you deal with GI matters, do not commit in writing any derogatory or highly critical remarks about any person, action, or program of an outside institution. Also, consider if such remarks are appropriate and productive under any conditions. During any ongoing dispute or litigation involving you in your capacity as a GI staff member, the Director's Office must be kept currently informed of any major development.

6. Public Service

As a public institution of higher education and a land-grant university, the UA and all of its subdivisions have missions in the area of education, research, and public service. The institute encourages all of its employees to seek meaningful ways to share the special knowledge and expertise of the GI with persons outside the institute. The institute's most important public relations tool is the attitude of its staff toward those who contact the GI for whatever reason: nothing substitutes for the courteous and helpful response.

Through the Information and Education Outreach Office, the institute regularly supports such public service activities as tours for visitors, the newspaper column "Science Forum," the quarterly newsletter, etc. Special events, such as public seminars conducted by PIs, and an occasional open house have also been presented. Staff members are encouraged to contribute their talents to the public service effort, either as individuals or collectively, and particularly in the areas of education and science literacy.

Part Two: Faculty and Graduate Student Research

I. FUNDING THE GI ENTERPRISE

Most GI financial support is derived from external grants and contracts, making success dependent on research faculty efforts in writing and submitting proposals (mostly unsolicited). The GI also depends on operating funds from the State of Alaska appropriation, which is part of the appropriation to UAF. The GI budget is

complicated because of its blend of sources, and the total income must therefore be estimated at the beginning of the state's fiscal year to establish the budget. The Fund 1 (state appropriation budget) is prepared independently from external fund budgets. The GI Administrative Team produces a draft Fund 1 budget and the Faculty Council provides comment in producing the final budget.

Success depends on the accuracy of budgetary projections for each PI's research work, as well as on PI success in securing external funding. Faculty members are urged to plan responsibly, budget their time, track charges to their grants and contracts, and track both available funds and outstanding commitments (the Business Office will help). It is important to inform the Director's Office of your plans for proposal submission, your communications with funding agency program directors, and the status of proposal reviews at these agencies. Be prepared to receive constructive criticism or, at times, indiscriminate pressure from the Director's Office about the need to submit more and better proposals.

1. External Support

External funds may cover salaries of PIs, postdoctoral fellows, technical and clerical staff dedicated to the project and graduate assistantships for students working on dissertations under the PI's direction. It also may cover project related travel expenses, publication of papers, scientific equipment, postage, long distance calls, etc.

UAF charges overhead on all grants and contracts; more than half of this overhead revenue is returned to the GI for certain administrative expenses. Fund 3 is the name used to designate external funds minus the overhead.

External funds are also called **restricted funds** because they are awarded for specific programmatic purposes; there is very little flexibility to move funds from one budget item to another (e.g., salaries to equipment).

2. Institutional Support (State Appropriation)

The State of Alaska appropriation for GI operating costs usually covers only about 10 percent of total expenditures at the GI. The term **Fund 1** is used to designate state appropriations plus the overhead received from grants and contracts (plus student fees and other incidental income).

State funds are also called unrestricted funds (because there is no priority programmatic restriction and there is greater flexibility to move from one budget item to another).

GI faculty has charged only 25% of their salary, on average, to the state appropriation in recent years. In some areas of inquiry, however, opportunity for external funding is low, particularly for projects specific to Alaska. For this work, in-house proposals are submitted to the director, who may allocate state funds.

3. GI Policy on PI Financial Support

a. Unrestricted fund (State of Alaska unrestricted general funds allocated to the GI) charges by a PI should stay below six months per year on a 3-year running average. PIs who fail to meet this expectation place an undue burden on their fellow PIs, and the director will have no choice but to consider placing them on a 9-month contract until their funding situation improves. All contractual changes will be made on a fiscal year basis only.

b. A newly hired PI will be given three years to ramp up his/her external funding to the expected level but the following will apply:

1. A new faculty member is guaranteed a 12-month contract for the first three years; however, satisfactory performance will include an expectation of increasing external support after the first year.

2. A critical review of performance will be completed by the end of the third year to determine contract renewal.

c. A PI should discuss his/her funding situation for the next 12 months with the director during the annual evaluation interview.

d. A copy of the GI policy on PI finance will be attached to the letter of appointment for all new hires.

4. Departmental Instruction

Time spent by GI faculty teaching in the departments is charged to a special account and is reimbursed by the department in question using a given formula. The time reimbursed is usually less than the time actually spent teaching a course. This often presents a problem: federal law prohibits using federal research grant and contract monies to subsidize any classroom activity.

5. The GI Budget Process

Each faculty member has two salary reservoirs, one in Fund 1 (state appropriation) and one in Fund 3 (external funds). Before the state fiscal year starts July 1, the Business Office must estimate the external resources that remain available to or will be generated by each faculty member during the fiscal year. The projected external funds amount is used to fill each person's Fund 3 reservoir; the Fund 1 reservoir is then set to cover the remaining amount needed.

Fund 3 allotments are based only on predicted external funding; as the fiscal year goes on and actual funding is known, adjustments must be made accordingly to Fund 1 position allotments. This must be done without changing the grand total of the state appropriation.

Usually, only Fund 1 monies are allocated for newly hired faculty members. These PIs are expected to submit proposals to obtain external funding for their research and to become self-supporting after a year or two.

II. LONG-RANGE PLANNING

1. The Long-Range Plan

Long-Range Planning prepares the GI to take advantage of upcoming opportunities in research and aims at keeping its faculty at the forefront of scientific development. It sets guidelines for scientists' work and related administrative actions, based on:

1. Current scientific questions in the particular discipline;
2. Activity going on elsewhere in the discipline;
3. The PI's own current resources and capabilities;
4. Opportunities for financial support.

2. Research Priorities

Group Leaders and individual faculty are expected to generate new research directions, which may result in requests for new equipment, new regular positions, or expanded work space. The director sets research priorities with the assistance of the advisory board, the faculty council, and based on discussions of research goals in faculty meetings, balancing ongoing and new projects.

III. ADVISORS TO THE GI

1. The Advisory Consulting Board

This distinguished group meets every 12-18 months with the director, faculty, staff and students to review the state of the Geophysical Institute and advise the director on management and fiscal issues. The board also advises the director on national and international trends in new research directions. Board members (three to six) are appointed by the director, and one member is designated to chair the board, act as the board's spokesperson, and coordinate the preparation of a written report to the chancellor and president after each full meeting. The report is available to institute staff.

At the board meeting, the GI director presents a confidential "state of the institute" report. Research group leaders or other researchers also present scientific progress reports in public session, and board members visit with research groups. Between meetings, the board members may come to Fairbanks on individual site visits and submit personal reports on their impressions and make recommendations to the director.

2. Scientific Review Panels The board is also served by outside scientific review panels composed of researchers in the institute's seven disciplines. The review

panels meet on a rotating basis, approximately once every three years, to consider recent progress, current research, and consult on plans for future development.

IV. EXTERNAL SUPPORT

1. Proposal Submission Process

These steps are required for all proposals in which the GI is responsible for all or part of the work:

Proposals must be submitted to sponsors through the proper channels of approval. When deciding to submit a proposal, the first step is to contact the Proposal Office for a proposal number and instructions on funding agency procedural requirements. At this stage or earlier, the PI should also contact the prospective funding agency program manager. Because the UAF enters into a binding contract, the UAF must endorse the proposal and approve its concept and content, even if the funding source does not require a formal proposal.

Proposal budgets will be prepared by the Business Office which should be supplied with a draft budget at the earliest possible time, even if the remainder of the proposal is still in preparation. To maintain credibility with agencies, a downward-revised budget should be accompanied by a cover letter prepared by the PI or the GI proposal Office stating concisely and specifically what parts of the original proposal will not be carried out, or will be carried out in reduced fashion.

The principal investigator will select two peers to review the proposal. Reviewers are subject to the director's approval and must have qualifications appropriate to conduct a sound review, but need not be GI faculty. Reviewers will focus mainly on scientific content and value, feasibility, and the proposal's organization, consistency, and clarity. In addition, reviewers should indicate if specific steps, such as editing, proofreading and formatting are needed before the proposal meets minimum standards of quality. PIs must allow sufficient time for the review and revision process because iterations may be necessary.

The Proposal Office can provide the following services in the proposal preparation process, depending on the time available to meet the proposal deadline (at least two weeks of lead-time is normally required to provide the full range of services):

- Type proposals or use disk conversion or scanning to enter first drafts typed by PIs into the Proposal Office;
- Enter corrections or revisions, including retyping of the proposal during the review process if major changes are necessary, such as added or rewritten chapters;
- Edit the writing;
- Proofread and spell-check the text;
- Put the proposal in the appropriate format;
- Scan or paste-up figures;

- Complete agency forms and prepare signature pages;
- Prepare cover letter;
- Circulate the final version for GI and UAF signatures (if time allows; otherwise the PI must assume responsibility for this step to allow WPC staff to continue work on other proposals);
- Copy the final proposal;
- Mail the proposal to agency and program manager;
- Distribute and file internal copies.

PIs may elect which of the above GI Proposal Office services to use, except for those which specifically address the UAF and funding agency requirements. The GI Proposal Office will accept whatever portions of a proposal are ready for processing, even if the remainder of the proposal is still in preparation. The GI Proposal Office supervisor will set deadlines for any steps PIs may ask the GI Proposal Office to complete. PIs must recognize that the GI Proposal Office often works on several proposals simultaneously and that it may not be possible to meet the proposal submission deadline for all of them, if sufficient time is not allowed for proposal preparation steps that involve people other than the PI. Priority of processing during rush times will be given to proposals that have been submitted to the GI Proposal Office two weeks or more before the submission deadline set by the funding agency.

The Proposal Office Supervisor will review all proposals to ensure that GI quality standards for presentation and format have been met, and that agency proposal submission requirements have been fulfilled, no matter to what extent the proposal was or was not prepared by the Proposal Office.

The director will then review the final draft before it is circulated for signatures, focusing mainly on the clarity of the abstract and general presentation, budget adequacy and consistency, and policy aspects (appropriateness for the GI; possible competition with other UA scientists or units, etc.). The decision whether a proposal is ready and acceptable for submission through the GI rests with the director, and will take into account the GI Proposal Office supervisor's review.

A key function of the director is to help PIs and authors after submission, during the proposal follow-through process (review and negotiation period). PIs are requested to inform the Director's Office of all important post-submission developments until final acceptance or rejection. If a proposal rejection notice is received, notify the Business Office.

2. Writing the Proposal

The general purpose of any proposal is to persuade the readers to do something, whether it is to persuade a potential customer to purchase goods and/or services, or to persuade your employer to fund a project or to implement a program that you would like to launch.

Any proposal offers a plan to fill a need, and your reader will evaluate your plan according to how well your written presentation answers questions about WHAT you are proposing, HOW you plan to do it, WHEN you plan to do it, and HOW MUCH it is going to cost. To do this you must ascertain the level of knowledge that your audience possesses and take the positions of all your readers into account. You must also discern whether your readers will be members of your technical community, of your technical discourse community, or of both, and then use the appropriate materials and language to appeal to both. You might provide, for those outside of your specific area of expertise, an executive summary written in non-technical (easily accessible) language, or you might include a glossary of terms that explains technical language used in the body of the proposal, and/ or attach appendices that explain technical information in generally understood language.

The most basic composition of a proposal, as with any other written document, is simple; it needs a beginning (the introduction), a middle (the body of material to be presented) and an end (the conclusion/recommendation).

Proposals are informative and persuasive writing because they attempt to educate the reader and to convince that reader to do something. The goal of the writer is not only to persuade the reader to do what is being requested, but also to make the reader believe that the solution is practical and appropriate. In persuasive proposal writing, the case is built by the demonstration of logic and reason in the approach taken in the solution.

Facts must lead logically and inevitably to the conclusion and/or the solution presented. Evidence should be given in a descending order of importance, beginning with the most important evidence and ending with the least important.

Any questions that the reader might pose should be anticipated and answered in a way that reflects the stated position of your proposal. It is important that the writer also considers all sides of the argument, providing other alternative solutions to the problem, but showing how the one chosen is superior to the others included. (c) 2000 - Alice Reid, "A Practical Guide for Writing Proposals" Revised and updated 10/13/00

3. PI Management of Grant/Contract Research

When a proposal is funded, the PI will be notified by the agency or the Business Office. Give the Business Office a project code name and use it instead of the grant or contract number in all related transactions (time sheets, work orders, purchase orders, etc.).

A monthly statement of accounts is given to the PI by the Business Office. These status reports are not mere paperwork: they allow PIs to carefully monitor their charges to a grant/contract.

Responsible fiscal management of grants and contracts is expected of PIs as an integral part of their research duties and is considered in the yearly faculty evaluation process. If you see that a budget line item will be over-expended, immediately check with the Business Office. Some agencies such as NSF allow budget changes, others do not; some require written approval from the contracting officer.

4. NSF Organizational Prior Approval System (OPAS)

In delegating to the GI authority to approve certain budgetary changes, NSF expects (NSF GC-1) we will assure that the proposed action:

a) Is necessary to achieve the project objectives supported by the grant;
b) Is consistent with the grant terms and conditions;
c) Is consistent with NSF and grantee policies;
d) Represents effective utilization of institutional resources;
e) Does not constitute a change in scope.

We are further required to explain the reasons for the change. When you submit a request for approval under OPAS, make sure to provide detailed and convincing information, especially regarding point (a) above.

Transfers from salary or any non-travel category to domestic or foreign travel to attend conferences and symposia (AGU, IUGG, etc.) are not considered necessary to achieve project objectives (any necessary attendance should have been included in the proposal). The director will not necessarily approve such OPAS requests.

Requests for transfers accepted for consideration will be those for transfers from domestic travel to foreign travel, and transfers from salary to travel to attend specialized workshops or planning meetings directly affecting the course of the research work for the grant in question.

5. GI Endowment Fund

The Geophysical Institute Associates' Endowment Fund has been created to accumulate resources to provide a needed financial edge. The fund is managed by the University of Alaska Foundation, an IRS 501(c) 3 non-profit charitable organization not part of the University of Alaska. The principal sum of the endowment remains inviolate and rests with the foundation in perpetuity.

Private investment provides the Geophysical Institute the flexibility to respond to new opportunities for growth that is not possible using contract, grant and state funding. It enables the institute to act promptly when new challenges arise.

A portion of the earnings of the endowment are reinvested in the endowment's name to ensure its continued growth and to combat inflation. The remainder of the earnings is provided as a fund available to the director of the Geophysical Institute. The director appoints an Endowment Fund Committee (consisting of the director, a Director's Office representative, the assistant director of finance, a faculty, staff, and student representative, and a local community representative). This committee advises the director on the appropriate expenditure of the annual earnings from the institute associates' endowment. Possible uses for the funds include enabling visiting scholars to come to the institute, enhancing the quality and usefulness of the Keith B. Mather Library, providing local outreach activities such as summer internships to high school students, and purchasing research and support equipment.

V. INSTITUTIONAL SUPPORT (STATE APPROPRIATION)

1. GI Projects Funds (GIP)

Time spent on general GI activities such as occasional public service, proposal review, meetings, etc., must be charged to the category designated GIP. Only faculty on the GI payroll can charge to GIP. **A faculty member obliged by default to charge more than 3.75 months a year to GIP may be considered by the director to be performing unsatisfactorily in the yearly evaluation review.** No more than nine months a fiscal year can be charged to the combined GIP, teaching and leave accounts by a GI faculty member.

2. Administrative Support Charges

Charge new and renewal proposal typing to Proposal; charge research manuscript typing to grant or contract that funded the research.

3. Research-related Travel (see Part One, Section III, Travel, Item 4.)

VI. GRADUATE STUDENTS

Graduate students are an integral part of the GI, both from the standpoint of their research work and their education. As a university research institute, we are dedicated to the education and mentoring of graduate students. The academic policy is given in the UAF Graduate Manual.

1. Graduate Research Assistantship Policy

Research assistantships are awarded to graduate students by the GI director. The research assistantship is governed by the policy of the department to which the student belongs. Research assistantships for graduate students working in the GI are derived from grants and contracts awarded by outside agencies to GI researchers. An assistantship is considered a stipend rather than employment, for a period of education rather than hourly remuneration for work done. A research assistantship does not carry any fringe benefits.

A research assistant is expected to devote a minimum of 20 hours weekly during the nine months academic year and a minimum of 40 hours weekly during the three summer months to research under the supervision of the student's thesis advisor. The research work assigned by the thesis advisor need not be directly related to the student's thesis. Stipends are based on a level of effort equal to half-time (20 hours per week) during the nine academic months and full-time (40 hours per week) during the three summer months. Special arrangements at a lower level can be made between a student and the advisor subject to the approval of the director. Stipends are conditional on the availability of funds; renewals cannot be guaranteed, even if the conditions stipulated below are met. Assistantships must be approved by the director. The maximum aggregate periods during which a student may receive an assistantship, from any unit or combination of units within the UAF, are determined by the departmental policy. Students should consult the policy of their department(s). Tuition waiver for research assistants shall follow the current UAF policy. Assistantship renewal is conditional to the student's good standing as defined by UAF rules and to satisfactory performance as judged by the student's graduate advisory committee. An assistantship can be terminated or suspended for cause upon 30-day notice at the recommendation of the student's advisory committee. Absences: the need for a graduate student to take an occasional leave of absence is recognized. Consult the appropriate manuals for policy description.

2. Graduate Student Travel

For research-related trips to field sites or other out-of-town facilities, see the rules stated for the GI research staff in Part One under Travel. For situations where the sponsoring grant or contract contains insufficient funds or has terminated before the travel date, a Graduate Student Travel Fund has been established, managed by the GI Business Office and administered by the GI graduate students. The students administer and promote the fund, review and select meritorious applications for awarding funds within the account's available balance. The student committee is responsible for defining the selection criteria and how the funds may be used, subject to legal restrictions.

VII. SEMINARS

1. Geophysical Institute Seminar

Oral and written information exchange among scientists is essential to scientific progress. Seminars, conferences, and journal articles are the formal means for this exchange. All researchers have a professional duty to stay informed of work in their own specialization and in related disciplines. GI seminars and colloquia serve this purpose. Special seminars are arranged from time to time to suit the convenience of visiting speakers. Research groups may organize periodic seminars or meetings. Journal clubs are informal periodic meetings mainly intended to expose graduate students to recent articles in the scientific literature.

VII. PUBLICATIONS

Scientists have a professional obligation to commit research results to writing for dissemination to the scientific community in published form. The products of basic research are published in recognized scientific journals. In some areas of applied research, publication also may be in the form of agency reports, maps, a computer program, etc. The GI also publishes materials for a wide audience with the goal of promoting science literacy, science education, and an understanding of institute activities.

1. Publications in Scientific Journals

Submitting articles to professional journals is the responsibility of the authors. Consult the librarian on procedures for payment of page charges and reprint orders. Editorial services are available to PIs in the Information and Education Outreach Office.

Reprints. Authors are responsible for satisfying all reprint requests and distributing reprints to their own mailing lists. The specific procedure follows (it does not apply to the GI Report Series or other UAF-produced publications):

(a) Reprint orders from the journals may be handled by the library or the author. They must be paid from the author's grant or contract or institutional support;

(b) When reprints arrive, the library must receive ten copies for its own files, archives, display, etc., and the rest are retained by the author;

(c) Reprint requests addressed directly to the library are passed on to the author.

2. Geophysical Institute Report Series:

These publications are intended for more comprehensive accounts of scientific or technical work than can be published in the journals. They are published irregularly, when occasion warrants. They may be final reports on grants or contracts, technical information on new instrumentation, computer programs, geophysical maps, tabulations of data, etc. They must not merely duplicate material to be published in journals. Dissertations normally will not be accepted in this category. Before a report is authorized, an audience interested in the material should be identified. The author is responsible for compiling a distribution list. The reports are photocopied and bound at the institute. These reports should be edited by staff in the Information and Education Outreach Office. The report numbers are issued by the supervisor of the Proposal Office.

GI Biennial Report

This book of approximately 250 pages is the most important single compendium of GI activities. It is mainly intended as a progress report to our funding agencies,

including the State of Alaska, and to the scientific community at large. The level of presentation should be commensurate with an informed but not specialized readership, i.e., Scientific American style. PIs are required to provide brief accounts of their research for inclusion. Feature articles may be invited from members of the staff on current topics of special interest. The report is compiled and edited by the GI Information and Educational Outreach Office every other year. Approximately 1500 are distributed; a separate mailing list is maintained.

Geophysical Institute Quarterly is a newsletter distributed four times a year to approximately 3,000 people. It is intended to supplement the Geophysical Institute Biennial Report and to serve a broader, less specialized audience. The newsletter includes feature stories and other information for the Alaska public, state legislators, media organizations, teachers, and others. The GI research staff is encouraged to contribute story ideas or articles to the information and Education Outreach Office, which is responsible for planning the newsletter and supervising its production.

Miscellaneous Published Materials

To meet administration requirements and public service needs, the GI produces a variety of materials on an occasional basis, such as brochures, news releases reports, topical handouts, and posters. The number of these projects produced in any given year depends on GI needs, available funding, and support staff time. Most of these materials are produced by the Information and Education Outreach Office, the Digital Design Center, or both (see Support Services section in Part One for information on assistance available at these offices).

Alaska Science Forum

Each week 150 newspapers throughout Alaska and Canada carry "Alaska Science Forum," a column produced by the GI as a public service to promote science literacy and interest in scientific research. More than 3,000 columns have been produced since the project started in 1976; they are indexed and made available to Alaska teachers for classroom use. Columns have also been used or cited by radio producers and magazines. GI faculty members, students and staff are invited to submit column ideas to the Information and Education Outreach Office.