

Observing Facilities Assessment Panel (OFAP) Terms of Reference and Operating Procedures

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Purpose

Geosciences research requires specialized facilities, instrumentation and field support services to carry out scientific field work that is needed to understand complex, interdependent geophysical processes. The National Science Foundation (NSF), Division of Atmospheric Sciences (ATM), Lower Atmospheric Observing Facilities (LAOF) Program, through the National Center for Atmospheric Research (NCAR) / Earth Observing Laboratory (EOL), the University of Wyoming (UWY) and the Colorado State University (CSU) sponsors these facilities and maintains and deploys them for the NSF-funded geosciences research community.

The primary function of the Observing Facility Assessment Panel (OFAP) is to provide technical assessments of facility requirements to EOL and university facility managers in order to optimize support of NSF-sponsored observational science. In this capacity, the OFAP interacts with the user community, facility providers and the funding agencies by providing valuable information and input concerning experiment design and facility usage. The feedback and technical evaluation presented by the OFAP, together with feasibility analyses and cost estimates provided by EOL or university facility managers, are taken into consideration before a final decision is made by individual NSF program officers whether to support or decline funding for a project.

Composition

The OFAP is composed of a pool of 18 scientists with broad-based experience in observational studies of the atmospheric and oceanic sciences. Members are appointed by the EOL director based on recommendations by NSF program officers, current OFAP members, facility managers and NCAR staff. They serve staggered, four-year terms. Attendance is requested from a subset of the OFAP pool, depending on the number of facility requests received, areas of expertise required, and existing conflicts-of-interest. The usual size of the committee is 15 people and OFAP members will attend an average of six meetings during their term. The meeting is headed by the EOL director and the OFAP chair, who is elected by the OFAP members. The OFAP chair is expected to serve as a regular member for the first year before taking over vice-chair and chair duties during the second and third year. During the fourth year, the individual will go back to regular duties while providing guidance to the new chair if needed. OFAP members who are principal or co-investigators are automatically excluded from meetings in which their requests are considered. In those cases where a panel member has a conflict of interest (see Appendix 2) with one or more of the requested projects, s/he is excluded from participating in the deliberations and asked to leave the room for the duration of the discussion.

OFAP Process

The OFAP primarily evaluates two types of requests for facility support: those requests in support of NSF-sponsored research, which have awards from an NSF grants program or written endorsements from the appropriate NCAR division director and are eligible for NSF/ATM Deployment Pool (DP) funds¹ support, and those for non-NSF-sponsored activities, which are funded by other agencies. In addition, the OFAP also reviews requests for a small number of NCAR facilities that are not currently covered by the DP but require special funds from the sponsoring NSF program officer. In all cases, NSF-sponsored research takes precedence over other requests.

Meetings

The OFAP meets twice per year at NCAR/EOL in Boulder, Colorado. Meetings are held in spring (May) and fall (November) over a three day period. The main purpose of the meeting is to evaluate all facility requests received for a given deployment time frame. As time allows, meetings may also include information items from NSF, NCAR and the universities, as well as technical/scientific briefings on past and future field programs and new observing system developments and upgrades.

Preparation for Meeting: NCAR/EOL is responsible for handling all organizational, logistical, and clerical support for the meeting. In this capacity, EOL coordinates and distributes all materials, maintains the OFAP web site, develops the meeting agenda, maintains and updates long term facility request schedules, and assists the OFAP chair and vice-chair in conducting the meeting. All responsibilities are carried out in consultation and close coordination with the NSF ULAFOS Program Officer, the OFAP chairs, facility managers, and others as appropriate.

Facility Request Procedures: Request procedures depend on the overall cost of a project. Facility requests for “small projects” defined as requests for deployment pool funds under \$1 million can be submitted for either the spring or fall meeting, one year ahead of the deployment phase. “Large projects”, defined as requests costing more than \$1 million in DP funds or as projects of significant complexity (as judged by the responsible NSF program officer), require additional supportive documentation, specifically an Experiment Design Overview (EDO) and a Scientific Project Overview (SPO). While small projects are considered at both meetings, EDOs for large projects are only considered once per year during the spring meeting two years ahead of the requested field program. If encouraged by the appropriate NSF program officers, facility requests for large projects are then evaluated during the following fall meeting (for more details see “New Policies, Procedures and Guidelines for Science Programs that Require Field Facilities” on the EOL website at

¹ The NSF deployment pool is funding dedicated to the exclusive support of expenses directly associated with the deployment of the NSF Lower Atmospheric Observing Facilities for NSF-supported research. Allowable expenses include extraordinary salaries and benefits, aircraft /field system operations, travel, materials and supplies, purchased services including equipment rental. Non-allowable expenses include regular salaries and benefits, operation and maintenance, research and development costs, PI expenses, non-NSF supported instruments and observing systems.

http://www.eol.ucar.edu/dir_off/OFAP/info/NSFprocedures.pdf and
http://www.atd.ucar.edu/dir_off/OFAP/info/RequestCheatSheet.pdf.

Feasibilities and Cost Estimates: Once the PI(s) have sent a facility request to EOL and/or the universities via email to the appropriate contact person (<http://www.atd.ucar.edu/requests.html>), the material is posted on the OFAP website. The OFAP web site is password protected and only accessible to NSF and NCAR/EOL staff, university facility managers and OFAP members. Facility managers identify one “Project Facilitator” for each project, who is an EOL/university employee and usually responsible for preparing at least one feasibility analysis. At the same time, EOL, in consultation with the universities, produces a global feasibility analysis that takes into consideration staffing and facility resources, and lays out all possible project combinations that can be accommodated. The global feasibility, together with cost estimates and feasibility analyses, is forwarded for review to NSF two months before the OFAP meeting. At the same time, copies of the cost estimates and feasibility analyses are provided to the requesting PI(s).

OFAP Responsibilities: Each OFAP member has access to all facility requests, feasibility analyses and cost estimates as well as other necessary information via the web site. OFAP members are queried for their review preferences and conflicts-of-interest before they are assigned by EOL as reviewers for requests in their area of expertise. EOL management assigns one lead and two to three additional reviewers from the OFAP for each major request. About one month before the meeting, each reviewer receives copies of the relevant materials, including requests, portions of the scientific proposal, feasibilities, cost estimates and other information relevant to each assigned facility request. Reviewers are encouraged to contact PIs through the project facilitators prior to the panel meeting to clarify all aspects of the request.

Reviewers are asked to evaluate each request on the basis of the following criteria:

- (1) *Science:* While it is not intended for the OFAP to supplant or second-guess the normal peer-review process for the scientific proposals associated with a facility request, the evaluation of a facility request can only be reasonably accomplished in the context of the overall scientific plan.
- (2) *Experiment Design:* Special consideration is given to the strengths/weaknesses of the experiment design and its adequacy to achieve the stated scientific objectives. Attention is paid to requested resources (e.g., flight hours) and whether they are appropriate to accomplish the scientific objectives.
- (3) *Scientific Benefit-to-Cost Ratio:* The likely scientific success of the project relative to estimated facilities costs is judged.
- (4) *Educational Benefits:* The educational benefits derived from the project, especially the involvement of graduate and/or undergraduate students in a meaningful way, is addressed.
- (5) *Other:* Any other comments/concerns.

Each reviewer provides a short summary of his/her comments to EOL via email a few days ahead of the meeting. These comments are distributed at the start of the OFAP deliberations to the panel, NSF representatives and EOL/university management.

Request Evaluation Process during Meeting: All requests and EDOs are evaluated in expanded session, although the OFAP chair and the EOL director reserve the right to limit participation. Participants in the deliberations usually include OFAP members, NSF representatives, EOL and university management, project facilitators, project managers and facility administrators. In case of major, multi-agency field programs, other federal program managers may be invited to attend as well.

At the beginning of the evaluation, the NSF Lower Atmosphere Research Section (LARS) representative comments on the status of the NSF research proposal associated with each facility request. If the request is from an NCAR scientist, an NCAR division director or designee comments or provides a letter and approval of any required additional support (e.g., divisional support, travel funds). In the case of major facility requests, EOL in consultation with NCAR scientific division directors orally summarize the results of an anonymous peer review. In situations where major scheduling or funding conflicts exist among the requests under consideration, NSF provides priority guidance to EOL. If NSF has decided not to support a project or if a project has failed to receive endorsement of an NCAR division director, it will be removed from formal consideration by the OFAP, although suggestions for improvement or other helpful comments from the OFAP are still appropriate.

The OFAP chair then determines the order in which the requests are introduced, considering such factors as conflicts-of-interest (see Appendix 2), availability of project facilitators and reviewers and effective use of the panel's time.

Each request is introduced by the lead OFAP reviewer who will summarize the scientific objectives and hypotheses in a short presentation, followed by a summary of the technical feasibility presented by the NCAR/university project facilitator. Each assigned OFAP reviewer then presents his/her evaluations using the criteria listed above before the discussions are expanded to all attendees (including facility managers, project facilitators and EOL project managers). If a question arises that requires clarification, the EOL project facilitator may contact the PI for details.

The OFAP considers all NSF pending and supported requests before finalizing its findings. For each request, the OFAP provides a written assessment to EOL management regarding deployment of a requested facility, which will be shared with the NSF ULAFOS Program Officer. Summaries will focus on, but are not limited to, a specific allocation of facility usage (e.g., days in the field and/or number of flight hours), the amount of deployment funds, suggested adjustments to the experiment design (e.g., alternate flight plans, scan strategies, increases/decreases of flight hours) and possible schedule modifications, if necessary.

Under certain circumstances, NSF-sponsored observing facilities may be allocated for use by non-NSF-sponsored projects on a cost-recovery basis. All costs for these projects must be covered by the sponsoring agency and are recovered by the divisional and/or university facility. To be allocated, such non-NSF projects must meet the principle of there being a "net benefit to the NSF community", which can be based on, but not limited to, one or more of the following criteria:

- The project supports or enhances the science objectives of the NSF-sponsored community.
- The project provides desirable practical training and experience for facility staff.
- The project provides revenues that significantly enhance the objectives of an NSF-sponsored facility development.
- The project meets a national need to which NCAR or other NSF-sponsored facilities can uniquely contribute.

The procedures for OFAP review and assessment of facility requests associated with non-NSF-sponsored projects are similar to those described earlier for NSF-sponsored programs. NCAR management shall only be concerned with such requests and associated OFAP findings from the aspect of ensuring that the requests are not in conflict with funded NSF programs. EOL management, in consultation with NSF will then determine whether a facility can be made available to non-NSF projects. Non-NSF sponsored requests for the University of Wyoming King Air are handled by the University of Wyoming without OFAP involvement. Under certain circumstances, the OFAP review for a cost recovery project can be waived at NSF's discretion.

Post-meeting Procedures: Immediately following the meeting, the OFAP assessments are shared with the NSF LARS Program Officer and other attending NSF representatives. While the OFAP assessment is an important part of the facility allocation decision, the funding decision for a field deployment is solely the responsibility of the individual NSF program officers, and is dependent on the successful review of the supporting science proposals. Allocation decisions for NCAR-sponsored projects will be made by NSF dependent on the successful review of the supporting science proposal(s) and resources available. Once EOL and the university managers receive notice from NSF about a funding decision, a letter is sent to the requesting PI(s) sharing the assessment and informing him/her whether the requested facility will be made available or not. The support letter includes details about the amount of resources allocated, the time frame for the project, the name of the responsible facilities project manager and any other pertinent information.

At the end of each project, the PI is required to fill out an EOL/university evaluation form to provide feedback on the actual field deployment and staff performance.

Confidentiality Guidelines for Members of the NCAR Observing Facilities Assessment Panel (OFAP), Project Facilitators and other OFAP Participants

Purpose

Maintaining confidentiality allows OFAP members to express expert judgments and opinions about proposed projects and facility requests freely and objectively, without concern that these judgments and opinions might become known to the proposers. Confidentiality prevents a third party from gaining a competitive advantage through obtaining privileged information. Confidentiality also eliminates the possibility that incorrect or incomplete information is passed on to outside parties to their detriment or disadvantage.

OFAP members have access to the deliberations and other information that is not generally available to others in the community. In addition to their responsibility to not disclose this information outside the OFAP, members also are responsible for not using such information for personal gain. The guidelines presented here are intended to define and clarify the responsibilities for maintaining confidentiality. The term "Assessment Group" as used below includes OFAP, EOL and university staff, as well as other participants.

Confidentiality of Peer Reviews and Reviewer Identities

Reviews and reviewer identities are confidential and are not to be disclosed to persons outside NSF or the assessment Group, except that verbatim copies of assessment (without the name and affiliation of the reviewer) will be sent to the principal investigators.

Confidentiality of Discussions within the Assessment Group

The content of all discussions taking place during executive session of the Assessment Group is confidential and may not be disclosed to any persons outside NSF or the Assessment Group, except that copies of recommendations from the Assessment Group may be sent to the PIs.

Confidentiality of Proposals and Facility Requests

NSF and facility organizations receive proposals and facility requests in confidence and must protect the confidentiality of their contents. For this reason, Assessment Group members are not to copy, quote, or otherwise disclose or use material from any proposal or facility request that they review. This does not preclude Assessment Group members from talking directly to the originating PIs about a pending proposal or facility request. If an Assessment Group member believes that a colleague can make a substantial contribution to a review, he/she should consult the OFAP chair for guidance before disclosing either the contents of the proposal/ request or the applicant's name.

Confidentiality of Information not generally available to the Community

Members of the Assessment Group sometimes gain access to information not openly available to the community. Members may not use that information for personal benefit or make it available for the personal benefit of any other individual or organization. This is to be distinguished from the entirely appropriate general benefit of learning more about the NSF, learning from other Assessment Group members, or becoming better acquainted with the state of a given discipline.

Conflict-of-Interest Guidelines for the NCAR Observing Facilities Assessment Panel (OFAP), Project Facilitators and other OFAP Participants

Purpose

NCAR policy is that OFAP procedures for NSF observing facility resources are fair and equitable to all requestors. Recommendations and decisions are based on objective judgments of merit without regard to subjective personal biases. The guidelines presented here provide a framework by which Conflict-of-Interest (COI) situations can be identified and resolved, thus minimizing the level of personal bias in the facility use and field project assessment process.

Responsibilities of Members

Appointment as an OFAP member requires awareness of COI situations that may arise. Examples of potentially biasing affiliations or relationships are listed below. A COI with one or more requests may exist when OFAP members are asked to review observing facility requests including associated research proposals.

In some instances, a COI is known only to the individual panel member. Each panel member is responsible to declare immediately each COI and to bring the matter promptly to the attention of the OFAP chair. The chair determines how the matter should be handled and additional steps, if any, to take. In most cases where the chair has judged that a COI exists, the conflicted panel member is asked to excuse himself/herself from the meeting during those discussions. In some situation a COI may only require the panel member to abstain from the discussions on that particular request. In other instances a COI is judged to be minor or non-existent and the member will continue to participate in the discussions. Members who have submitted a facility request as either a PI or Co-PI are excused from attending the OFAP meeting.

Examples of Conflict-of-Interest Situations

COIs must be declared if any of the various affiliations or relationships listed below are valid:

(1) Affiliations with the same department as the requestor:

- Employment currently or within the last 12 months within the same department as professor, adjunct professor, visiting professor, or similar position. In case of NCAR, conflicts are within the same division.
- Current membership on a visiting committee or similar body at the department. Holder of any office, governing board membership, or relevant committee chairpersonship in the department.

(2) Relationships with an Investigator or other person who has a personal interest in the request and/or proposal:

- Known family or marriage relationship. The COI exists only if the relationship is with a principal investigator, co-investigator or project director.

- Business or professional partnership.
- Present or past association as thesis advisor or thesis student (at least 5 years).
- Significant current collaboration.

(3) Other relationships with the requestor or the request:

The interests of the following persons are to be treated as if they were the panel member's own:

- A competitive relationship, such as would exist if the panel member was a PI or Co-PI on a proposal or facility request that competes for schedule, facilities, or other resources with the program under consideration by the OFAP.
- Any other relationship, such as close personal friendship that might affect the member's judgments, or be seen as doing so by a reasonable person familiar with the relationship.
- Any other conflicts known to the panel member that would prevent him/her from reviewing a project in a non-biased, fair and objective way.

I have read the Conflict of Interest Guidelines and agree to comply with them to the best of my knowledge.

Name:

Date: