

SUPPORTING STATEMENT FOR PAPERWORK REDUCTION SUBMISSION
MEDICAL CLEARANCE FOR DEPLOYMENT TO THE POLAR REGIONS (3145-0177)

A. JUSTIFICATION

1. CIRCUMSTANCES MAKING COLLECTION OF INFORMATION NECESSARY

Presidential Memorandum number 6646 (dated February 5, 1982) sets forth the National Science Foundation's overall management responsibilities for the entire United States national program in Antarctica. All individuals who anticipate traveling for the National Science Foundation (NSF) to the Polar Regions either under the auspices of the U.S. Antarctic Program (USAP) (Antarctica) or under NSF's Directorate for Geosciences' Office of Polar Programs (certain regions of the Arctic) are required to take and pass a rigorous physical examination prior to deploying. The medical screening records for deployment to the Polar Regions are part of the National Science Foundation's System of Records that are protected by the Privacy Act of 1974. The requirement for this determination of physical status is found in 42 U.S.C. 1870, with the medical screening process further described in 45 CFR 675. The harsh and hostile environments of the Polar Regions with their extreme temperatures, remote locations and limited medical care capabilities make it difficult and sometimes impossible to evacuate individuals who may be suffering from chronic or severe medical conditions in a timely manner. Therefore, it is essential that we take steps to ensure that the participants in polar programs that are under the auspices of the National Science Foundation are physically fit for deployment.

2. HOW, BY WHOM, AND PURPOSE FOR WHICH INFORMATION IS TO BE USED

NSF requires all U.S. Antarctic Program participants and select participants in the Arctic program to take and pass a medical and dental examination, and for those who winter over in Antarctica, a psychological examination also is required.

The participant takes an annual medical and dental examination from a physician and dentist of his or her own choosing. The information is used to determine whether or not the individual meets the medical screening criteria for polar deployment. It is also used to determine whether or not an existing illness or medical condition can be accommodated within the medical care capabilities of the on-station facilities and physicians. In addition, should the individual experience any medical or dental problems while deployed the information is used to assist the treating physician or dentist in making an informed diagnosis and deciding on a treatment regimen. Finally, those individuals who are selected to winter over in Antarctica are given a psychological examination by a USAP-designated psychologist to determine whether or not he or she is psychologically adapted for a long-term assignment to the Polar Regions.

The information on the medical forms includes the traveler's personal and emergency points of contact, deployment information (location, dates, employer, job titles), personal medical history, and social behavior (alcohol and tobacco use). This information helps inform the medical providers of the participant's current (within 12 months) and past physical conditions to assist in determining their suitability for deployment and work in the extreme temperatures of the Polar Regions. Additionally, each person is given a personalized list of laboratory testing requirements with instructions to the doctors and dentists performing the examinations (including relevant forms for them to complete) that will inform the medical decision makers. The packet also contains acknowledgement and consent documents that individuals need to read and sign and/or initial. These include: Important notices regarding potential penalties for

engaging in illegal activities in countries being transited en route to Antarctica; medical risks of traveling to the Polar Regions; medical screening for blood-borne pathogens; and a medical treatment consent form for minors deploying to the Polar Regions. The medical packet also includes a set of waiver documents for those individuals who do not meet the requirements of the *Polar Medical Screening Guidelines*, but would like to be granted an administrative waiver for the identified medically disqualifying condition. The information collected in the waiver packet is used to ensure the individual knows and understands the reason for the disqualification and the employer is aware of the employee's disqualification and they both believe the individual can still participate in the program without unnecessarily risking his or her health and safety or that of others. The information is used by the medical providers to make recommendations to NSF regarding the feasibility of granting or denying the waiver. The information is used by the NSF Medical Director to determine whether a waiver is warranted.

3. USE OF AUTOMATION.

The medical forms have been converted to an electronic format with a unique, computer-generated control and tracking number. This number will be sequentially assigned by a database called Pipeline, and will appear at the top of each page of the electronic version, which also will pre-populate the participant's name and birth date on each page. Previous submissions of these forms included two sets, one each for the Arctic and the Antarctic participants, with no distinguishable difference in actual medical information collected. The differences were in specific locations of deployment and in the number and titles assigned to the forms to make it easier for the participants. Additionally, the previous medical packet included 11 different forms (mostly numbered sequentially), along with mandatory reading materials and instructions to the participants and to their personal physicians. This request has combined the previously

separate Arctic and Antarctic forms into one set with one form number to be used by all non-uniformed participants, regardless of the Polar Region to which the individual will be deploying. The new form consolidates all of the information (except for the waiver packet) from the previous forms into one continuous 14-page form (NSF Form 1700), with a separate six-page mandatory reading packet. The forms will be available on the NSF U.S. Antarctic Program's website: <http://usap.gov> and by written or telephone request to the prime support contractor's subcontractor, the University of Texas Medical Branch at Galveston – Polar Medical Operations; or from the NSF Geosciences Office of Polar Programs (PLR). These forms are intended to be controlled and completed electronically and individuals will be encouraged to do so; however, participants may obtain and complete the forms by hand or typewriter, if they prefer. No version of the completed forms may be submitted electronically due to insecure email transmission, but individuals may complete and save the forms, and retrieve the data on their personal computers. The waiver packet consists of four pages (the employee's application and release of liability statement, and the employer's endorsement and release of liability statement). It is in paper form only and is only sent to those individuals who are found not physically qualified and who specifically request to be considered for a waiver (this is usually less than 2% of all the people seeking to travel to the Polar Regions). It is not available for downloading from any of the websites previously cited.

4. EFFORTS TO IDENTIFY DUPLICATION.

This is a unique program within the National Science Foundation's Office of Polar Programs. There are no duplications within the agency. Within the Office of Polar Programs, the medical records are shared between the Arctic and Antarctic programs to reduce the burden on those participants who work in both Polar Regions and to reduce the overall costs to the NSF.

5. SMALL BUSINESS CONSIDERATIONS

Not applicable.

6. CONSEQUENCES OF LESS FREQUENT COLLECTION.

There are a number of medical illnesses and conditions, including injuries that are worsened by the effects of extreme cold weather. A less frequent collection of medical, dental and psychological information would allow individuals whose medical conditions have changed within the last 12 months to deploy without having their conditions examined or identified so that a determination of qualifications and adaptability could be made. This lack of information could jeopardize not only the individual but also other program participants.

7. SPECIAL CIRCUMSTANCES FOR COLLECTION.

The burden is reduced for those individuals who have no known medical conditions and who are under the age of 40. A full medical examination is required every other year. Those individuals who have pre-existing medical conditions or those who have requested administrative waivers of their medical conditions may be required to submit additional information prior to deploying for the purpose of determining whether their illnesses can be accommodated in accordance with NSF regulations and where applicable, with the Americans with Disabilities Act. Occasionally, individuals are requested to repeat tests when laboratory results seem inconclusive or results are borderline. This normally will occur within 30 days of the contractor's receipt of the initial paperwork. Individuals are not requested or required to provide any further information once a physical qualification determination has been made. The medical forms are available through the Internet to allow individuals to download only those forms specific to them. They are required to provide a signed copy to the NSF's primary support contractor's medical staff by mail or fax and they have the option to retain a copy for themselves or provide copies to their

personal physicians. The NSF contractor retains a copy of each individual's medical packet and sends one copy to the polar location where the individual is deploying. Allowing individuals to download the forms has now added the burden of photocopying the forms so they may retain a copy for themselves or their physicians and so our contractor can retain a copy in the U.S. and send one to the medical department at the deploying location. Previously the form was a multi-part carbon form.

8. FEDERAL REGISTER NOTICE

The notice for this collection was published on June 1, 2020, at 85 FR 33203. No comments were received.

OUTSIDE CONSULTATION. The Polar Environment, Health and Safety Office within the Office of Polar Programs holds an annual conference with a panel of federal physicians and non-federal consulting physicians to the federal panel. The Panel provides advice to the Office of Polar Programs regarding the medical screening criteria used during the prior field deployment season, quality of on-ice healthcare and proposed changes for the upcoming field deployment season. The Panel also provides advice on pharmaceutical procedures, records documentation, healthcare provider credentialing and myriad other healthcare related issues. In addition, individuals who require administrative waivers in order to deploy are encouraged to submit letters from their personal physicians to support their requests. Employers are also asked to endorse all waiver requests prior to consideration by the NSF. Physicians from other federal agencies conduct periodic audits of the USAP medical records and screening process and the Veterans Administration has agreed to lend specialized medical expertise in the event of a catastrophic or other major medical event occurring on the ice over the winter.

9. GIFTS OR REMUNERATION

Not applicable.

10. CONFIDENTIALITY PROVIDED TO RESPONDENTS.

The medical screening and treatment records are included in the National Science Foundation's privacy systems of records and are protected by the Privacy Act of 1974. Confidentiality and overall protection of individual's privacy is an integral part of the Act. All individuals whose official duties involve access to any medical information are required to comply with the Privacy Act of 1974 and with additional NSF policies. The contractors must file records management plans which discuss in detail exactly where the records reside, who accesses them by position title, how they are stored and retrieved, and how they are disposed. In addition, the contractors are required to review these plans annually and notify NSF of any proposed changes and obtain NSF approval. Periodically, NSF staffs conduct site visits to the sites where medical information is stored to ensure that these approved measures are being followed. The current primary support contractor for the Antarctic has provided a statement for all of their medical staff to sign which informs them of their obligations to keep this information confidential and the penalties to expect if there is a willful breach.

11. QUESTIONS OF A SENSITIVE NATURE

Since this is a medical collection, most questions are of a sensitive nature and therefore all questions, responses and other information obtained are treated as sensitive. However, procedures are in place to ensure confidentiality of respondents (See Number 10 above.).

12. ESTIMATE OF BURDEN

Public reporting burden for this collection of information varies according to the overall health of the individual, the amount of research required to complete the forms, the time it takes to make an appointment, take the examinations and schedule

and complete any follow-up medical, dental or psychological requirements and the completeness of the forms submitted. The estimated processing time is up to six weeks from the time an individual submits the forms and the contractor notifies that person of his or her final clearance status. An additional period of up to eight weeks may be required for the individual who was disqualified to be notified of the disqualification, to request and receive the waiver packet, to obtain employer support, to do any follow-up testing, to complete the waiver request, to have it notarized, to return the waiver request to the contractor plus any follow-up information.

Public reporting burden for this information collection is estimated to be at least 10 hours per participant per packet of forms. All individuals, except the uniformed services of the Department of Defense, deploying to the Antarctic to Greenland and to other select areas of the Arctic that are under the auspices of the National Science Foundation's Office of Polar Programs must complete these forms.

There are approximately 3,650 submissions per year with a small percentage (about 3%) under the age of 40 who are required to provide annual submissions but only take a complete physical examination every two years. The total annual burden in hours is 36,500.

ANNUALIZED COST TO RESPONDENTS

The total annualized cost to respondents is estimated to be \$1,168,000. This figure is based on an average hourly salary of \$32.00. This figure is derived by averaging the salaries of each category (contractors, research personnel and government) and then obtaining an average of that figure. We estimate 42 percent of those deploying are contractor employees; 24 percent are research personnel and the remaining 35 percent comprise government, international and all other official program visitors. The range of occupations is from student-researchers, janitors

and cooks (minimum wage) to construction workers, physicians, scientists, Senior Executive Service and Congressional staff.

13. CAPITAL/STARTUP COSTS

There are no capital or startup costs.

14. ANNUALIZED COST TO THE FEDERAL GOVERNMENT

Annual Recurring Costs	
Staff time in creating, filing and maintaining files	\$200,000
File folders and other office supplies	15,000
Courier service to medical/dental reviewers	10,000
SUBTOTAL	\$225,000
Costs in Gathering Information in Files	
Staff time in working w/candidates and reviewers	\$90,000
Medical and Dental Exams (contract and other)	775,000
Medical and Dental Reviews (contracts)	150,000
Psychological exams and psychological travel	250,000
SUBTOTAL for Antarctic Program	\$1,265,000
SUBTOTAL for Arctic Program (See note below.)	70,000
TOTAL	\$1,560,000

Approximately 3,200 of the 3,650 submissions are processed by one primary contractor; the remaining are processed by separate contract, which involves medical services not related to the Polar Regions. The approximate cost for the polar services is \$70,000 annually.

15. CHANGES IN BURDEN

The number of participants traveling to the Antarctic and Arctic has increased over the past three years; however, the amount of time to complete the forms has stayed the same. In 2011, to comply with the Genetic Information Nondiscrimination Act of 2008 (GINA), NSF removed all request for genetic information of an individual or a family member of the individual using these forms to go to Antarctica, which led to this burden reduction.

16. PUBLICATION OF COLLECTION

Not applicable.

17. SEEKING APPROVAL TO NOT DISPLAY OMB EXPIRATION DATE

NSF will display the OMB expiration date, in addition to the OMB Approval Number.

18. EXCEPTION(S) TO THE CERTIFICATION STATEMENT (19) ON OMB 83-I

NSF has no exceptions.

19. STATISTICAL METHODS

Not applicable