

inspection by representatives of the National Science Foundation or USAP.

#### Supplemental Factors

##### *A. Participant Qualifications and Minimum Experience Requirements*

In order to participate on this expedition, the participants will require a minimum of 500 parachute jumps. Also, they are required to undergo Flight Physiological Training under a program approved by the aviation board of their respective country. There will be approximately 5 high-profile members of the expedition who are not experienced skydivers who will be accompanying an experienced tandem skydiving instructor who will be responsible for their safety and conduct. Further training on Antarctic Operations will be conducted before departure from Punta Arenas. The majority of the participants are veterans of one of our North Pole Skydiving Expeditions and are experienced in cold weather operations.

##### *B. Non-Interference With Other Scientific Projects*

The Friendship Expedition will exercise caution not to interfere with projects at the South Pole Station as well as any other encountered along the travel route.

##### *C. Conclusion*

The Friendship Expedition represents no more than a minor or transitory impact upon the Antarctic Environment. This expedition is being undertaken and conducted by environmentally-responsible individuals with the goal of protecting and maintaining the Ecology of the Antarctic Continent for the generations to come.

Interested persons are asked to comment within 30 days of this notice.

Ms. Nadene Kennedy,  
Permit Office.

[FR Doc. 96-22181 Filed 8-29-96; 8:45 am]

BILLING CODE 7555-01-M

#### **Notice of Permits Issued Under the Antarctic Conservation Act of 1978**

**AGENCY:** National Science Foundation.

**ACTION:** Notice of amendment to a permit issued under the Antarctic Conservation of 1978, Public Law 95-541.

**SUMMARY:** The National Science Foundation (NSF) Office of Polar Programs, has amended the waste management permit issued to Adventure Network International (ANI) under the Antarctic Conservation Act of 1978. The amendment is a modification

to an existing permit which is not a material change to the terms and conditions of the permit.

**FOR FURTHER INFORMATION CONTACT:** Ms. Nadene Kennedy, Permit Office, Office of Polar Programs, Rm. 755, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230.

**SUPPLEMENTARY INFORMATION:** On July 19, 1996, the National Science Foundation received a request from ANI to issue a new waste management permit for ANI operations within Dronning Maud Land and the Sor Rondone and surrounding mountains in Antarctica. The operations proposed, air transport of clients and members of some national antarctic programs and support of climbing expeditions, are substantively the same and supplement those described in the ANI permit 96WM2 for the period of December 27, 1995 to December 26, 2000. Considering the exemplary performance of ANI in the administration of the terms and condition of past permits, the current permit, and the minor nature of the request, the permit 96WM2 is amended to include the referenced locations of ANI operations for the pendency of the permit.

Erick Chiang,

Acting Deputy Director, Office of Polar Programs.

[FR Doc. 96-22180 Filed 8-29-96; 8:45 am]

BILLING CODE 7555-01-M

#### **Notice of Permit Applications Received Under the Antarctic Conservation Act of 1978 (P.L. 95-541)**

**AGENCY:** National Science Foundation.

**ACTION:** Notice of Permit Applications Received under the Antarctic Conservation Act of 1978, Pub. L. 95-541.

**SUMMARY:** The National Science Foundation (NSF) is required to publish notice of permit applications received to conduct activities regulated under the Antarctic Conservation Act of 1978. NSF has published regulations under the Antarctic Conservation Act at Title 45 Part 670 of the Code of Federal Regulations. This is the required notice of permit applications received.

**DATES:** Interested parties are invited to submit written data, comments, or views with respect to these permit applications by September 26, 1996. Permit applications may be inspected by interested parties at the Permit Office, address below.

**ADDRESSES:** Comments should be addressed to Permit Office, Room 755, Office of Polar Programs, National

Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230.

#### **FOR FURTHER INFORMATION CONTACT:**

Nadene G. Kennedy at the above address or (703) 306-1033.

**SUPPLEMENTARY INFORMATION:** The National Science Foundation, as directed by the Antarctic Conservation Act of 1978 (Public Law 95-541), has developed regulations that implement the "Agreed Measures for the Conservation of Antarctic Fauna and Flora" for all United States citizens. The Agreed Measures, developed by the Antarctic Treaty Consultative Parties, recommended establishment of a permit system for various activities in Antarctica and designation of certain animals and certain geographic areas requiring special protection. The regulations establish such a permit system to designate Specially Protected Areas and Sites of Special Scientific Interest.

The applications received are as follows:

1. *Applicant:* R. Natalie P. Goodall, Sarmiento 44, 9410 Ushuaia, Tierra del Fuego, ARGENTINA.

Permit Application No. 97-002.

*Activity for Which Permit is Requested:* The applicant is a free-lance research biologist conducting research on marine mammals and birds in Tierra del Fuego, Argentina. This season the applicant will lecture onboard cruise ships visiting the Antarctic Peninsula and proposes to salvage skeletons and bones of cetaceans and marine birds (especially penguins) encountered during shore visits. The salvaged bones will be used to compare with those collected from similar species in Tierra del Fuego region. All salvaged materials will be stored in the applicant's research collection in Ushuaia, Argentina. No bones will be collected from large cetaceans, except earbones for identification purposes only.

*Location:* Antarctic Peninsula and adjacent islands.

*Dates:* December 1, 1995-April 30, 1997.

2. *Applicant:* Bill J. Baker, Department of Chemistry, Florida State University, 150 W. University Boulevard, Melbourne, Florida 32901.

Permit Application No. 97-004

*Activity for Which Permit is Requested:* Introduction of non-indigenous species into Antarctica.

The applicant proposes to take four slants each of four non-pathogenic microorganisms to McMurdo Station, for use exclusively in the Crary Lab, to perform antimicrobial assays on extracts from marine invertebrates. These microorganisms (*Aspergillus niger*,

*Bacillus subtilis*, *Escherichia coli*, and *Saccharomyces cerevisiae*) will be handled using sterile techniques and will be disposed of by sterilization at the conclusion of the study.

*Location:* McMurdo Station, Ross Island, Antarctica.

*Dates:* October 1, 1996–February 28, 1997

3. *Applicant:* Douglas Quin, Wild Sanctuary, 13012 Henno Road, Glen Ellen, California 95442.

Permit Application No. 97–005.

*Activity for Which Permit is*

*Requested:* Taking. The applicant is a participant in the Artist and Writer's Program and will make Digital Audio Tape (DAT) sound recordings of mammals and birds being studied by various researchers in the field this season. Although the applicant may need to be in close proximity to the wildlife to gain quality recordings, he plans to take care not to harass or otherwise upset the animals.

*Location:* Ross Island and McMurdo Sound vicinity.

*Dates:* November 1, 1996–December 21, 1996.

4. *Applicant:* Donald B. Siniff, Dept. of Ecology, Evolution and Behavior, 100 Ecology Building, University of Minnesota, 1987 Upper Buford Circle, St. Paul, Minnesota 55108. Permit Application No. 97–006.

*Activity for Which Permit is*

*Requested:* Taking. Import into the U.S. The applicant plans to tag and release approximately 350 Weddell adult seals and approximately 550 Weddell pups as part of a continuing investigation of the McMurdo Sound Weddell seal population, which was begun in the early 1960's and has continued to the present. In addition, blood and tissue samples will be taken from up to 200 individuals and imported to the U.S. for DNA extraction and toxins analysis. These samples are primarily to supplement future research into the paternity and genetic characteristics of the McMurdo populations specifically and Antarctic seals in general. Objectives of this research are 1) to continue the long-term tagging studies by tagging all pups born into the McMurdo Sound population and to replace tags on previously tagged individuals so they will not be lost from the tagged population, and 2) to update estimates of population parameters annually and to continue the analyses and test of hypotheses associated with this data base. Mark-recapture surveys, necessary to obtain all the estimates required for current capture-recapture models, will also be conducted.

A preliminary investigation into the feasibility of conducting lavage

techniques using anesthesia will be performed to examine the prey utilization of Weddell Seals. Previous research of stomach samples from harvested seals indicated that Antarctic silver fish is the major prey constituent during the austral summer. Since stomach content is no longer a viable option, and otoliths from fecal samples are often too eroded for accurate age estimation, lavage techniques offer a non-lethal techniques of obtaining this data.

*Location:* McMurdo Sound vicinity, Antarctica.

*Dates:* October 1, 1996–September 30, 1997.

5. *Applicant:* Donald B. Siniff, Dept. of Ecology, Evolution and Behavior, 100 Ecology Building, University of Minnesota, 1987 Upper Buford Circle, St. Paul, Minnesota 55108. Permit Application No. 97–007.

*Activity for Which Permit is*

*Requested:* Take. Import into the U.S. Enter Site of Special Scientific Interest.

The applicant proposes to enter the White Island Site of Special Scientific Interest (SSSI#18) to tag up to 15 adult Weddell seals, and tag and draw blood samples from approximately 5 Weddell pups, as part of a continuing population study. The White Island seal population has been a focus of interest dating to the early 1960's. This group of seals represents an isolated population that is very small and the evidence suggests it has very limited exchange of individuals with the McMurdo Sound population. Since intensive censusing was begun in the late 1980's, no new (tagged) adults have appeared in the population. Thus, the genetics of this population is of interest because it will increase understanding of such concepts as inbreeding depression and genetic drift.

*Location:* SSSI#18—North-west White Island, McMurdo Sound, Antarctica.

*Dates:* October 1, 1996–September 30, 1997.

6. *Applicant:* Phillip R. Kyle, Dept. of Earth & Environmental Science, New Mexico Tech, Socorro, New Mexico 87801. Permit Application No. 97–008.

*Activity for Which Permit is*

*Requested:* Enter Site of Special Scientific Interest No. 11, Tramway Ridge, Mount Erebus.

The applicant proposes to access Tramway Ridge (SSSI#11) to measure the temperature of the soil as a means of monitoring the volcanic activity of Mount Erebus. In addition, as the only area of soil on Mount Erebus, he intends to measure the quantity of CO<sub>2</sub> in the soil and to measure its flux into the atmosphere. This will provide information on the degassing behavior

of the magmatic system underlying Mount Erebus.

*Location:* Tramway Ridge, Mount Erebus, Ross Island (SSSI #11).

*Dates:* December 1, 1996–December 30.

7. *Applicant:* Wayne Z. Trivelpiece, Department of Biology, Montana State University, Bozeman, Montana 59717. Permit Application No. 97–009.

*Activity for Which Permit is*

*Requested:* Taking, and Import into the U.S. The permit applicant proposes to capture up to 50 Adelie adults, from the pack-ice in the vicinity of Marguerite Bay, in order to collect diet samples using the water off-load technique. Birds will be released unharmed after handling.

*Location:* Pack ice in and around Marguerite Bay, Antarctic Peninsula.

*Dates:* January 1, 1997–March 15, 1997.

8. *Applicant:* David Ainley, H.T. Harvey & Associates, P.O. Box 1180, Alviso, California 95002. Permit Application No. 97–010.

*Activity for Which Permit is*

*Requested:* Take; Import into the U.S.; Enter Specially Protected Area and Enter Sites of Special Scientific Interest.

The applicant is conducting research to attempt to explain why penguin populations have been decreasing in the Ross Sea, by intensive studies at colonies on Ross Island. This work will be incorporated into the long-term study of populations dynamics mentioned in the Royds management plan. The applicant proposes to enter Cape Crozier (SSSI #4) and Cape Royds (SSSI #1) for purposes of banding up to 2,500 Adelie chicks and 250 adults per year. Approximately, 45 adult Adelies per year will be fitted with radio transmitters to be worn for 2–3 weeks during January and then removed. Another 250 adults per year will be given PIT tags (Passively Interrogated Transponder). The applicant also proposes to capture 35 adult penguins on the beach each year at the three colonies of intensive study and 10 at Beaufort Island (SPA #4) to collect tissues for stable isotope analysis, pump stomachs, band chicks and look for banded emigrants from the Ross Island colonies. While conducting work on Adelie penguins, the team will re-band, as needed, a large number of South Polar Skuas to continue a population study begun in 1961.

The applicant plans to import into the U.S. penguin tissue samples and scavenge up to 165 chick carcasses to stable isotope analysis in the U.S., which will require several months to complete analysis.

*Location:* Cape Crozier (SSSI #4), Cape Royds (SSSI #1) and Cape Bird, Ross Island, and Beaufort Island (SPA #5), Ross Sea.

*Dates:* November 1, 1996–January 31, 2002.

8. *Applicant:* Gerald L. Kooyman, Center for Marine Biotechnology, and Biomedicine, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, California 92093–0204. Permit Application No. 97–011.

*Activity for Which Permit is Requested:* Taking; Import into the U.S.; Enter Site Special Scientific Interest, and Enter Specially Protected Area. Ground counts will be made at two major Emperor colonies (Cape Washington and Coulman Island) and at a third smaller and most southern Emperor colony (Cape Crozier) bordering the Ross Sea. This is a continuation of the longest series of censuses of Emperor penguins in Antarctica. Cape Crozier remains small, less than 600 chicks, and its existence still seems tenuous after its decline to 15 chicks in the 1970's.

The applicant also proposes to capture up to 75 adult Emperor penguins, near the McMurdo ice edge and at Cape Washington. Some of these (about 10) will be maintained in an enclosure on the sea ice for up to 1 month while behavioral and physiological experiments are conducted. The birds will be allowed to dive at will through an ice hole. Approximately 30 adult Emperors will be captured/released/recaptured. Recorders will be attached to those birds for a few dives while they feed below the ice edge. Similar captures and releases with recorders will be accomplished near Cape Washington. Recaptures will occur after the two-week feeding commute. These experiments are designed to explore and comprehend the physiological responses that support the great diving capacities of those birds.

Seventy-five chicks will be collected over the season at Cape Washington. Fifty of these chicks will be weighed at fledging. Up to 5 chicks leaving the colony will be captured and released with satellite transmitters. Blood samples will be collected from an additional 5 chicks each week over the last month of development to measure selected hormone levels. After about one month, they will be released at the ice edge. If possible, the applicant proposes to collect 10 frozen eggs and salvage 2 adult Emperor carcasses for importation into the U.S.

*Location:* Beaufort Island (SPA #5), Cape Crozier (SSSI #4), Coulman Island,

and Cape Washington, McMurdo Sound vicinity.

*Dates:* October 1, 1996–March 31, 1997.

9. *Applicant:* Wayne Z. Trivelpiece, Department of Biology, Montana State University, Bozeman, Montana 59717. Permit Application No. 97–012.

*Activity for Which Permit is Requested:* Taking; Import into the U.S.; and, Enter Site of Special Scientific Interest. The applicant is conducting a continuing study of behavioral ecology and population biology of the Adelie, gentoo, and chinstrap penguins and the interactions among these species and their principal avian predators: skuas, gulls, sheathbills, and giant fulmars. Up to 1000 Adelie and gentoo chicks, plus 300 adults of each of all three penguin species, will be banded. Up to 50 adults of each penguin species will be fitted with radio transmitters and time-depth recorders to continue studying penguin foraging habits. The study also involves stomach pumping of 40 adult penguins per species. In addition the principal avian predators of the penguins, mentioned above, will also be studied, requiring up to 200 adults and 30 chicks of each species to be banded, if possible. One (1) milliliter sample of blood will be collected from each of a maximum of 20 breeding adults of each penguin species for DNA analysis as part of a collaborative genetic study. All captured birds will be released unharmed. Carcasses and skeletons of penguins and other birds salvaged at the study site will be imported into the U.S. for educational and scientific study. The applicant also proposes to collect grass (*Deschampsia* sp.) specimens for a colleague at Montana State University who is examining bacteria on grasses throughout the world.

*Location:* SSSI #8—Western Shore of Admiralty Bay, King George Island, South Shetland Islands, Antarctica.

*Dates:* October 1, 1995–April 1, 1996.

10. *Applicant:* Diana W. Freckman, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, Colorado 80523–1499. Permit Application No. 97–013.

*Activity for Which Permit is Requested:* Import into the U.S. and Enter Sites of Special Scientific Interest. The applicant proposes to enter five (5) Sites of Special Scientific Interest to collect soil samples to examine the dispersal and survival of nematodes in the soils, as well as examining how functional communities develop, and how these communities may be affected by disturbance. Site access will be by helicopter to the landing pad designated for each site and the duration of the visit to the site will be limited to several

hours with a group of no more than 4–5 people. Soil sampling protocols have been selected to minimize site disturbance. Manner of taking: Soil and/or rock samples will be placed in sterile plastic bags and returned to McMurdo where the nematodes will be immediately extracted. Remaining soil samples will be shipped to the U.S. for further biological and chemical analyses, and will be handled according to USDA guidelines.

The applicant also plans to introduce to Antarctica the nematode species *Aphelenchus avenae* as a standard in laboratory experiments to compare the anhydriotic strategy of *S. lindsayae* to provide insights into its response to varying environmental conditions. Extreme caution will be used to avoid contamination of the laboratory or outside environments with *A. avenae*. Cultures will be maintained in the lab in an incubator designated exclusively for this species. All work conducted with this nematode will be done under sterile conditions using a laminar flow hood. All cultures and materials used for this work will be autoclaved before disposal.

*Location:* Cape Royds, Ross Island (SSSI #1); Cape Crozier, Ross Island (SSSI #4); Caughley Beach, Cape Bird, Ross Island (SSSI #10); Canada Glacier, Lake Fryxell, Taylor Valley, Victoria Land (SSSI #12); and, Linnaeus Terrace, Asgaard Range, Victoria Land (SSSI #19).

11. *Applicant:* Arthur L. DeVries, Department of Physiology, 524 Burrill Hall, University of Illinois, 407 South Goodwin Avenue, Urbana, Illinois 61801–3704. Permit Application No. 97–014.

*Activity for Which Permit is Requested:* Introduction of Non-indigenous Species into Antarctica. Fifteen (15) specimens of New Zealand black cod, *Notothenia angustata*, will be cold acclimated in a closed seawater system in the aquarium at McMurdo Station. The cold acclimated specimens will be used in experiments to determine the role of the antifreeze glycopeptides in freezing avoidance, and for isolating DNA. The DNA will be screened for the presence of an “unexpressed” antifreeze glycopeptide gene. Sensitive blood serum freezing habit tests suggest cold acclimated black cod synthesize small amounts of antifreeze glycopeptide after acclimation to + 4 °C for 6 weeks.

Some specimens will be injected with purified antifreeze glycopeptides to determine if the presence of the antifreeze glycopeptides in the circulation is sufficient to provide avoidance of freezing or if it needs to be

integrated into the membranes of protected cells by synthetic ice crystals and the fate of the ice is determined.

The integument of the cod will also be used in experiments to determine whether it is a barrier to ice propagation due to its physical properties or whether antifreeze glycopeptides provide a physiocochemical barrier in conjunction with the integument. Brain lipids will also be analyzed to determine the degree of unsaturation of the phospholipid fatty acids.

Upon completion of experiments, the black code will be sacrificed and preserved in 10% formalin.

*Location:* McMurdo Station, Ross Island, Antarctica.

*Dates:* October 1, 1996–March 31, 1997.

12. *Applicant:* Ron Naveen, Oceanites, Inc., 2378 Route 97, Cooksville, Maryland. Permit Application No. 97-015.

*Activity for Which Permit is Requested:* Taking; Enter Sites of Special Scientific Interest. The Antarctic Site Inventory project intends to collect data and information regarding the biological and physical features of Antarctic Peninsula visitor locations. Survey of the various sites may involve slight disturbance to the animals at the site. Furthermore, the project may be requested to survey existing Sites of Special Scientific Interest (SSSI's) during the three-year period of this project. Access to the SSSI's is solely for survey purposes.

*Location:* Antarctic Peninsula visitor locations and Sites of Special Scientific Interest.

*Dates:* September 1, 1996–August 31, 1999.

Nadene G. Kennedy,

Permit Office, Office of Polar Programs.

[FR Doc. 96-22182 Filed 8-29-96; 8:45 am]

BILLING CODE 7555-01-M

## NUCLEAR REGULATORY COMMISSION

[Docket Nos. 030-31621, 030-31622; License Nos. 20-27938-03G, 20-27938-02; EA 96-234]

### HNU Systems, Inc., Newton Highlands, Massachusetts; Confirmatory Order Modifying License (Effective Immediately)

I

HNU Systems, Inc. (Licensee or HNU), is the holder of Byproduct Materials License Nos. 20-27938-03G and 20-27938-02 (Licenses) issued by the Nuclear Regulatory Commission (NRC or Commission) pursuant to 10

CFR Part 30. The Licenses authorize the distribution, possession, and use of sealed sources in devices generally licensed, not to exceed 100 millicuries per source and 1,000 millicuries per foil, in accordance with the conditions specified therein. The Licenses were due to expire on March 31, 1996. However, on February 29, 1996, the Licensee filed a renewal application and, in accordance with 10 CFR 30.36(a), the Licenses are under a timely renewal.

II

As a result of a June 1995 inspection, a Confirmatory Action Letter (CAL) was issued on June 15, 1995 and a Notice of Violation (NOV) was issued on July 27, 1995 to HNU for numerous violations characterized in the aggregate as a Severity Level III problem. The violations included the failure to: (1) notify the NRC that the Radiation Safety Officer (RSO) listed on the Licenses had been laid off and had not been replaced; (2) conduct a physical inventory of radioactive materials; (3) conduct leak tests of sealed sources at the required six month intervals; (4) calibrate survey instruments at the required six month intervals; (5) perform monthly surveys; (6) monitor exposures of individuals to radiation and radioactive material; (7) review the radiation protection program content and implementation at least annually; (8) report to the NRC any transfers of generally licensed devices; (9) maintain radiation safety record notebooks; and (10) provide training to Licensee staff.

Subsequently, the NRC conducted a follow-up inspection from December 8, 1995, to April 23, 1996, to review the Licensee's implementation of the corrective actions taken in response to the June 1995 CAL and July 1995 NOV. Based on this inspection, the NRC identified several repetitive violations and determined that the Licensee had not implemented adequately the corrective actions in response to the Notice and CAL.

Therefore, the Commission required further information from HNU in order to determine whether the Commission can have reasonable assurance that in the future, should HNU be permitted by the NRC to continue to perform licensed activities under the Licenses, it will conduct the activities in accordance with NRC requirements, and whether further enforcement action is warranted against HNU. Accordingly, the NRC issued a Demand for Information (DFI) to the Licensee on June 7, 1996, which required the Licensee to submit, among other things to the NRC, within 30 days

of the date of the DFI, in writing and under oath or affirmation:

1. a statement as to whether the Licensee will apply sufficient resources to manage an effective radiation safety program; and

2. a statement as to why the Licenses should not be revoked in light of the financial concerns and the repetitive violations.

In a letter, dated June 18, 1996, the Licensee responded to the DFI and indicated that it would: (1) commit the necessary resources to permit the RSO (who works part-time) to work up to 20 hours per week until full compliance with the radiation safety program requirement was achieved, which it stated could be done in 4 months, after which it believes that it can maintain compliance by the RSO working 10-12 hours per week; (2) designate an assistant RSO from a qualified member of the staff; (3) complete, by August 1, 1996, a Radiation Safety Refresher Course, including testing, for employees dealing with instruments containing sealed sources; (4) conduct an annual audit of the radiation safety program, and update quarterly reports of source transfers by October 1, 1996; (5) perform wipes of all sources taken from storage; (6) calibrate a second survey meter by July 15, 1996, to ensure one calibrated survey meter is available at all times; (7) continue its search for a missing 50 mCi Fe-55 source; (8) provide locked files for radiation safety records; (9) have an outside auditor conduct an audit of the organization after the program is brought into full compliance; and (10) meet the specified payment schedule that it negotiated with the NRC Fees Branch for the payment of fees.

In a followup call with the Licensee on July 18, 1996, the Licensee agreed that: (1) the RSO would work at least 20 hours per week, rather than 10-12 hours per week, until this condition was relaxed by the NRC; (2) it would have an outside auditor complete an audit of the organization by December 1, 1996; and (3) it would meet the other commitments made in its June 18, 1996 letter.

On August 7, 1996, the Licensee consented to issuing this Order with the commitments, as described in Section III below. The Licensee further agreed in its August 7, 1996 letter that this Order is to be effective upon issuance and that it has waived its right for a hearing. Implementation of these commitments will provide enhanced assurance that sufficient resources will be applied to the radiation safety program, and that the program will be conducted safely and in accordance with NRC requirements.