

## EXHIBIT

### CONTRACTOR ACKNOWLEDGMENT AND RELEASE

This Acknowledgment and Release is attached to and made a part of the contract dated \_\_\_\_\_ by and between the National Institutes of Natural Sciences and \_\_\_\_\_ (“Contractor”) regarding certain work (the “Work”) to be performed by Contractor at Subaru Telescope on the summit of Mauna Kea (the “Site”). This Acknowledgment and Release is being relied upon and inures to the benefit of Institute for Astronomy (IFA), National Astronomical Observatory of Japan (NAOJ), Subaru Telescope, the Research Corporation of the University of Hawaii (RCUH), the Office of Mauna Kea Management (OMKM), the University of Hawaii, and the State of Hawaii (the “Telescope Parties”).

1. Contractor hereby acknowledges the risks set forth below related to the Work. Contractor expressly agrees and accepts and assumes all such known and unknown risks associated with working at the Site. Contractor also agrees to abide by all the rules and regulations as stated in the attached information sheets concerning general safety and understands and accepts the consequences that can result from not adhering thereto. Contractor shall make each of its officers, principals, employees, agents, consultants, and any other person entering the Site through or under Contractor (collectively “Contractor Personnel”) aware of the risks as set forth herein and shall obtain the agreement of each person within Contractor Personnel to abide by all the rules and regulations as stated in the attached information sheets concerning general safety and to understand and accept the consequences that can result from not adhering thereto. Contractor hereby releases the Telescope Parties from and waives any and all liability, claims, demands, actions and causes of action whatsoever arising out of or related to any loss, damage, or injury, including death, that in any way arise from, are based upon, connected with or otherwise related to the risks set forth herein or a claim that Contractor was unaware of the risks as set forth herein. Contractor shall defend and indemnify the Telescope Parties from claims by Contractor Personnel from claims arising out of a failure by Contractor to carry out the promises set forth herein.

2. Contractor acknowledges, understands, and accepts:

a. All of the facts and information described in the attached information sheets including HIGH ALTITUDE HEALTH HAZARDS and the SIGNIFICANT HEALTH RISKS inherent in working at, visiting, and driving to the Site.

b. Working at the Site presents an inherent risk of injury, serious bodily harm or death. In particular, the risks include, but are not limited to, equipment failure of a motor vehicle, dangers of driving on paved and unpaved roads to the Site, vehicular traffic, actions of other people, unavailability of professional emergency medical assistance, and the EFFECTS OF HIGH ALTITUDE. Contractor understands the importance that none of the Contractor Personnel perform the Work at the Site with any of the following RISK FACTORS:

Pregnant  
Feel unwell  
Scuba diving within 24 hrs (48 hrs for repetitive or deep dives)  
Feel anxiety about visiting the summit  
Under 16 years of age  
Have previously experienced health problems at high altitude  
Suffer from cardio-pulmonary disease  
Are anemic  
Have a head cold or allergic rhinitis  
Feel “hung over” or excessive alcohol consumption within 24 hrs

3. Contractor shall obtain a statement from each person within Contractor Personnel to the effect that:

I am qualified, in good health and in proper physical condition to participate in the Work. I have no physical or mental condition which prevents me from entering the Site in a manner that is safe for others and me. It is my responsibility to take all appropriate actions in advance of, and while entering the Site. I further acknowledge and agree that I have the responsibility to consult with my physician to determine if medical conditions exist that would pose a direct threat to my health or the safety and health of others.

In the event that I sustain injuries or illness while at the site, I authorize Subaru Telescope to administer, or cause to be administered, such first aid or other treatment as may be necessary under the circumstances, to include treatment by a physician or hospital of Subaru Telescope's choice. I accept full responsibility for any medical expenses incurred as a result of these actions.

If Contractor Personnel is under the age of 18, this statement is signed by his parent or legal guardian on behalf of the parent/guardian and the minor.

4. Contractor hereby further agrees that if any portion of this Acknowledgment is held invalid, the balance of the Acknowledgment shall remain in full force and effect.

Contractor:

\_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Dated: \_\_\_\_\_



## HIGH ALTITUDE HEALTH HAZARDS

Subaru Telescope is located near the summit of Mauna Kea at 13,460 ft / 4,200 meter elevation, where the atmosphere has only 60% of the oxygen found at sea level, about 10% of the moisture, and where the average atmospheric temperature is about 32°F / 0°C.

The human body reacts to high altitude in a variety of ways. **Individuals who are pregnant, have a head cold or suffer from cardio-pulmonary disease should not attempt to work at or visit the summit. SCUBA divers** should not go to Mauna Kea (Hale Pohaku (HP) altitude) within less than 24 hours of diving. This can lead to the bends (decompression sickness / nitrogen narcosis). If you have made repetitive or deep dives or are in any doubt, you should extend this interval to at least 48 hours.

One of the body's reactions to high altitude is water dumping to allow the blood to carry more oxygen. Frequent urination is a symptom of this process. Failure to replace lost body fluids can lead to dehydration, severe headaches, and hypothermia. High altitude dilation of the brain's blood vessels, combined with dehydration, can lead to a headache as severe as a migraine. Telescope workers sometimes take aspirin or acetaminophen before departing Hale Pohaku (HP) for the summit to help avoid headaches.

Individual responses to altitude can vary greatly. **No one is immune from the effects or the potential dangers.** To lessen the risk of high-altitude health hazards, be in good health, dress warmly, drink lots of fluids, avoid alcohol and drugs, and pace yourself.

**It's important to acclimatize at least a 1/2 hour (1 to 1 ½ hours for first timers) at the Hale Pohaku (HP) facility or the Visitor Information Station (VIS) (9,200 ft / 2,800 meter level) before going to the summit. Those who will stay at the summit facility for more than eight hours are recommended to acclimatize at least 8 hours at the HP facility before going to the summit. Anyone may not stay at the summit for more than 14 hours within any consecutive 24 hours.**

**Do not go alone to the summit.** You may not always recognize the symptoms of altitude sickness in yourself. If you feel the onset of any unusual feeling or symptom, let someone know immediately. If you notice someone who appears to be suffering from some unusual feeling or symptom, ask how he or she feels.

<b>Major Emergency</b>		
<b>Major Symptoms</b> Severe Unrelenting Sudden Headaches Shortness of Breath (at rest) Chest Pain Abdominal Pain	<b>Major Signs</b> Slurred Speech Visual Disturbance Loss of Coordination Paralysis Seizures Collapse Slow or Rapid Heart Beat Labored Breathing Cough with blood tinged sputum Unrelenting Nausea or Vomiting	<b>Steps to Take</b> 1. Evacuation: Follow the Mauna Kea Emergency Procedures 2. Examine the victim 3. Call 911 with the following information: <ul style="list-style-type: none"> <li>• Your Location</li> <li>• Describe how the accident or illness occurred</li> <li>• Describe the victim's symptoms</li> <li>• Indicate the urgency needed for treatment</li> <li>• Describe the weather conditions</li> <li>• Establish the primary meeting place (Saddle Road Junction)</li> <li>• Describe the vehicle used to transport the victim</li> </ul> 4. Inform HQ Management

<b>Minor Emergency</b>		
<b>Minor Symptoms</b> <ul style="list-style-type: none"> <li>● Mild shortness of breath</li> <li>● Dizziness</li> <li>● Light headedness</li> <li>● Headaches</li> <li>● Visual Change</li> <li>● Palpitations</li> <li>● Chest Tightness</li> <li>● Nausea</li> </ul>		<b>Steps to Take</b> Rest 2. Administer Emergency Medical Oxygen (fixed flow type) 3. Descend to Lower Altitude (Hale Pohaku) 4. Inform HQ Management 5. If symptoms persist, proceed to a Medical Center Emergency Room

For detailed information, see: <http://www.naoj.org/Information/Tour/Summit/index.html>