Welcome Observers, Staff, and Contractors

This orientation packet is a compilation of important information needed to prepare for your visit to MGIO. In this packet you will find the following information:

- MGIO Information
- Security
- Preparation
- Red Squirrel Briefing
- Check-In Procedures
- Radio and Travel to the Observatory
- Safe Driving Policy
- Safety Bulletins
- Welcome from the Custodial Department
- Emergency Response and Contacts

Please be sure to read the information in detail prior to your visit. We highly recommend that you print these documents, or save them electronically, so that you will have them accessible during your visit.
Base Camp
1480 W. State Route 366
Safford, AZ 85546
Phone (928) 428 – 2739
Fax (928) 428 – 2854

Business Hours
Monday – Thursday 6 am to 4:30 pm
Friday 7 am to 3:30 pm

Website:
www.mgio.arizona.edu

Please Be Advised
Visitors arriving outside of our regular business,
please contact Base Camp during regular
business hours to make alternate arrangements
for gate key and radio pickup.
Telescopes are located on Emerald Peak
12500 W. State Route 366
Safford, AZ 85546
Steward Observatory

Director
Buell Jannuzi
Associate Director
Mark Buglewicz

Mt. Graham International Observatory

Director
Eric Buckley
Admin
Desirae Mendez
Emergency Response Coordinator
Kelly Baker

Custodial Supervisor
Donna Ornelas
Lead Custodian
Amanda Torrio
Custodian
Rogan Rios
Alexus Casillas

Maintenance Supervisor
Shane Olsen
Lead Equipment Mechanic
Doug Roden
Lead Maintenance Mechanic
Armando Alvarado
Maintenance Mechanics
Larry Thomas
Jose Trujillo
April Morton

Summer Youth Program
Crew Leader
Crew Driver
Summer Crew
MGIO Maintenance Duty System

We are committed to ensure the observatory operates smoothly, in order to do this, the maintenance crew has an on-call employee available after hours to address problems such as:
  • Utility/Electrical Issues
  • Maintenance Issues
  • Snow Removal

If you need to contact them, please call:
(928) 965 - 3100

For other issues regarding the observatory please contact the appropriate manager:
MGIO: Shane Olsen (928) 965 - 3102
LBT: Patrick Harley (928) 254 - 6993
SMT: Alyson Ford (520) 621 - 2495
VATT: Paul Gabor (520) 289 - 4167

See emergency contact list for additional phone numbers.
The University of Arizona Police Department (UAPD) have statewide police authority. They are the primary law enforcement responders at MGIO. UAPD work in conjunction with local law enforcement agencies to provide services for MGIO and other areas within Mt. Graham. The UAPD officers also provide emergency medical services and fire suppression support as needed.

**Mt. Graham Unit**

Sergeant Boltinghouse  
(928) 348 – 0001  
Radio Unit Assignment  
“Star 1”

UAPD maintains offices at  
Base Camp and Emerald Peak

Sgt. Boltinghouse can be contact via telephone or radio; in the event he is not available UAPD dispatch can be reached at (520) 621 – 8273. In the event of an emergency call 9 – 1 – 1.
The University of Arizona property includes Base Camp, Emerald Peak, Biology Camp, the access road, and staging area.

**On-Site Requirements**

**All employee & visitors must:**

1. Comply with state and federal laws, U of A rules and regulations, and Arizona Board of Regents.
2. Report crimes, violation of rules/regulations, serious personal injury, damage to University property/facilities, suspicious activity/people or dangerous animals to UAPD immediately.
3. Secure doors, buildings, gates, locks, property, or other securing devices/facilities during and after use.
4. Follow instructions from UAPD officers.
5. Report vehicle accidents involving any injury or damage.
6. Consumption of alcoholic beverages is permitted only within the designated living areas of the three observatory buildings, and only by those who are of legal age to consume alcohol.
WEAPONS, DANGEROUS INSTRUMENTS, EXPLOSIVES, FIREWORKS, AND PERSONAL PROTECTION DEVICES ON CAMPUS

Arizona Board of Regents policies 5-303 and 5-308 prohibit the use, possession, display or storage of any Weapons, Dangerous Instruments, Explosive Devices, or Fireworks, among other things, on The University of Arizona campus and on all land and in all buildings owned or under the control of The University of Arizona on behalf of the Arizona Board of Regents, except as provided in Section 12-781 of the Arizona Revised Statutes. No concealed carry permit exempts a person from these policies. These policies apply to all University of Arizona students, employees, visitors and guests.

Requests for exceptions to these policies may be reviewed and granted by the Chief of Police of the University of Arizona Police Department as the authorized University official.

Arizona Board of Regents Policy 5-308 (F)(24)(b) provides the following exception: "Use, possession, display, or storage (of weapons) is specifically authorized by an Arizona or federal statute governing law enforcement officers."
Definitions

Arizona Board of Regents Policies 5-302(22) and 5-308(E)(30) define a “Weapon” as follows:
• **Weapon:** Refers to any object or substance designed to (or which could be reasonably expected to) inflict a wound, cause injury, incapacitate, or cause death, including, without limitation, all firearms (loaded and unloaded, simulated and real), devices designed to expel a projectile (such as bb guns, air guns, pellet guns, and potato guns), swords, knives with blades of 5 inches or longer, martial arts weapons, bows and arrows, and chemicals such as tear gas, but personal safety devices as defined (see below) are not included in the definition of “weapon.”

Arizona Board of Regents Policy 5-302(5) and 5-308(E)(7) define “Dangerous Instrument” as follows:
• **Dangerous Instrument:** Means anything that under the circumstances in which it is used, attempted to be used or threatened to be used is readily capable of causing death or serious physical injury.

Arizona Board of Regents Policy 5-308(E)(11) and (13) define “Explosives” and “Fireworks” as follows:
• **Explosive:** Any dynamite, nitroglycerin, black powder or other similar explosive material including plastic explosives; any breakable container that contains a flammable liquid with a flash point of 150 degrees F or less and has a wick or similar device capable of being ignited.
• **Fireworks:** Any fireworks, fire crackers, sparklers, rockets or any propellant-activated devise whose intended purpose is primarily for illumination.
Violations

Arizona Revised Statutes Section 13-2911 prohibits the interference with or disruption of an educational institution, which includes non-compliance with or violations of Arizona Board of Regents Policies 5-303 and 5-308. Individuals who violate these policies may be subject to arrest under ARS Title 13.

Additional Information

Arizona Revised Statutes, Section 13-3102(A)(1)(b) requires that a person asked by a law enforcement officer if they are carrying a concealed weapon is required to accurately answer that officer. This statute applies to all University of Arizona students, employees, guests, and visitors.
Additional Information

Arizona Revised Statutes, Section 13-3102(A)(1)(b) requires that a person asked by a law enforcement officer if they are carrying a concealed weapon is required to accurately answer that officer. This statute applies to all University of Arizona students, employees, guests, and visitors.

Request for Exceptions

Pursuant to Arizona Board of Regents Policy 5-308 (F)(24), requests for exceptions to prohibitions on the use, possession, display or storage of a weapon, dangerous instrument, explosive material or device, torch, device with open flames, fireworks, bomb-making materials or dangerous chemical on University property, at a University sponsored activity or otherwise contrary to University policy must be submitted in writing and are subject to the following review process:

Any request to use, possess, display, or store a weapon on University property in connection with official University business must first be reviewed by the responsible Dean or Department Head. The Dean or Department Head may comment and shall forward the request to the Provost at: provost@arizona.edu for review and comment. The request must then be forwarded to the Chief of Police of the University of Arizona Police Department in writing at least ten (10) days prior to the intended date of such use, possession, display, or storage. The written request must have:

- Name of the requesting individual(s) and name(s) of individuals for whom the exception request is being made
- Contact information for the requesting individual(s), including:
  - telephone number
  - email address
  - mailing address
- Identify the purpose of the request.
- Identify how this request furthers the mission of the University.
- Identify the weapon.
- Identify the duration of the request.
- Identify a responsible person.
- Identify how the weapon will be secured.
- Identify how the weapon will or may be used.

The request will be evaluated by the Chief of Police, or his/her designated representative, and a written decision rendered within ten (10) working days. If the request is approved, the approval will include any conditions or restrictions necessary to require safety and consistency with the intent of the Arizona Board of Regents policy. If approval is given for an indefinite period of time, it must be reviewed annually and renewed by the requestor. The University of Arizona Police Department will keep all approved requests on file and available for confirmation by police officers.
Preparation

What to Bring

• Fully charged cell phone, cell phone charger, and water for vehicle travel
• Medications
  • Bring extra in case of emergency extended stay due to weather, fire, etc.
• Healthy Food (self-service kitchen available)
  • Healthy complex carbohydrates and proteins to provide sustained energy.
  • Food for food allergy or dietary restrictions.
• Flashlight with spare batteries
• Sunscreen, Sunglasses and Hat (for outdoors)
• Warm clothes, regardless of time of year (warm jacket, gloves, hat, scarf, boots in winter months).
• Safety shoes and other Personal Protective Equipment (PPE) as needed for the job (e.g. hardhat, safety glasses, etc.) as well as sandals for use in the shower and common areas.
• Certification cards for any equipment you will need to operate
• Other Medical
  • Asthma Inhalers, epi pens
  • CPAP, sleep aids
  • Accessibility devices
Mt. Graham International Observatory operates under a special use permit with the U.S. Forest Service.

In order to comply with the terms of the permit, **ALL** visitors must read and sign the Red Squirrel Briefing.
Mt. Graham Red Squirrel Briefing

The endangered Mt. Graham Red Squirrel is protected by the Federal Endangered Species Act of 1973, as amended. It is illegal to “take” (this means to harass, harm, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct) individuals of this species. This includes touching and feeding. If anyone working on the Mt. Graham International Observatory project “takes” (as defined above) a Mt. Graham Red Squirrel, they will be subject to prosecution under the Endangered Species Act.

Report all dead or wounded squirrels to the first available Forest Service Official. The Forest Service will report all dead or wounded squirrels to the US Fish and Wildlife Service (USFWS). Locations of dead squirrels will be immediately reported to the Forest Service so that the dead squirrel can be collected and preserved for study.

There is some concern that the squirrels could become dependent on human food, which in turn may reduce survival. Dispose of all trash in appropriate containers provided for that purpose.

There are Mt. Graham Red Squirrels near many Pinaleno Mountain roads. The squirrels do cross the roads. Drive carefully to avoid hitting any Mt. Graham Red Squirrels.

MGIO Site Requirements

I have read and understand the site requirements and the conditions under which they are issued:

- I will remain inside the clearing limits of the MGIO facilities (delineated by a yellow perimeter rope).
- I will not go beyond the clearing limits of the two mile, on way, observatory access road.

If these conditions are not met, I understand I will be in violation of the terms of the Special Use permit issues to the University of Arizona.
For the safety of all person’s traveling to the observatory, proper check in procedures should be followed during each visit to ensure their location is known in the event of an emergency.
Contractors and Visitors
Base Camp Check-In/Out

• Sign the Log In/Out Sheet
• Sign the Red Squirrel Briefing (annually)
• Obtain/Return
  • Gate Key
  • Radio (Verify it is on Channel 1 or “MGIO RPT”)
• Road Reference Marker Sheet
• USFS Permit (if applicable)
Observers and Staff
Check In/Out Procedures

• Base Camp Access
  • Keyless entry (personnel gate and office front door, access code should be provided prior to arrival)
• Simple In/Out (app or Base Camp computer)
• Sign the Red Squirrel Briefing (annually)
• Obtain/Return
  • Gate Key
  • Radio (Verify it is on Channel 1 or “MGIO RPT”)
• Road Reference Marker Sheet (optional)
1. Click the “Search” bar in the top right corner and type in your name

2. Select your name (Use the mouse to click anywhere near your name)

3. Select the “Update Status” button (Bottom right corner of the User Information Screen)

4. Select the location you are traveling by clicking on it or use the optional comment area to input info
AZ Route 366 Road/Access Road Clearance Information

Ensure that the radio is turned on and you are on Channel # 1 MGIO RPT.

Upon arrival at the one-way MGIO Access Road

- Unlock and open the gate with the gate key obtained at Base Camp
- Drive through the gate
- Close and lock the gate
- Call up for traffic clearance:
  - "One (?) vehicle(s) to proceed up the access road, downhill traffic advise.
  - If there is no response, repeat traffic clearance with your assigned/guest radio assignment - clear
  - "One vehicle to proceed down the access road, uphill traffic advise. 30 Clear"
  - If there is no response, you make proceed up the access road.
- The same procedure needs to be done before traveling down the access road to leave.
  - "One vehicle to proceed down the access road, uphill traffic advise"
  - Wait for response
  - "One vehicle to proceed down the access road, uphill traffic advise. 30 clear"
  - If no response, you may proceed down the access road.

If you receive a response for traffic on the access road, you must give them time to get to the top or bottom and repeat this process.
## Radio System Unit Assignment & Radio Channel List

<table>
<thead>
<tr>
<th>Description</th>
<th>Channel Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGIO Repeater - Hellograph Peak (PRIORITY)</td>
<td>MGIO/RPT 1</td>
</tr>
<tr>
<td>MGIO Repeater Bypass - Limited Range</td>
<td>MGIO TA 2</td>
</tr>
<tr>
<td>MGIO Simplex Communications</td>
<td>MGIO LOC 3</td>
</tr>
<tr>
<td>Graham County Sheriff #1</td>
<td>SCSO 1 4</td>
</tr>
<tr>
<td>Graham County Sheriff #2 (Repeater - Hellograph Peak)</td>
<td>SCSO 2 5</td>
</tr>
<tr>
<td>AZ Dept of Transportation Repeater - Hellograph Peak</td>
<td>ADO/T RPT 6</td>
</tr>
<tr>
<td>AZ Dept of Transportation Simplex Communications</td>
<td>ADO/T LOC 7</td>
</tr>
<tr>
<td>Forest Service Repeater - Hellograph Peak</td>
<td>USFS RPT 8</td>
</tr>
<tr>
<td>Forest Service Repeater - West Peak</td>
<td>USFS WPK 9</td>
</tr>
<tr>
<td>Forest Service - Limited Range</td>
<td>USFS LOC 10</td>
</tr>
<tr>
<td>Forest Service Fire Net</td>
<td>USFS NET 11</td>
</tr>
<tr>
<td>Kitt Peak National Observatory Mountain Operations</td>
<td>KPNO 12</td>
</tr>
<tr>
<td>Steward Observatory Operations</td>
<td>SO-FLWO 13</td>
</tr>
<tr>
<td>SAAO - Mt. Hopkins Operations</td>
<td>FLWO 14</td>
</tr>
<tr>
<td>Arizona Emergency</td>
<td>STATE 15</td>
</tr>
<tr>
<td>National Emergency</td>
<td>USA 20</td>
</tr>
<tr>
<td>National Weather Service</td>
<td>NWS RPT 37</td>
</tr>
<tr>
<td>Southwest Ambulance</td>
<td>SW A MB 38</td>
</tr>
<tr>
<td>National Weather Information - Safford</td>
<td>NWS RPT 39</td>
</tr>
<tr>
<td>Life Line Ambulance</td>
<td>LL Amb 20</td>
</tr>
</tbody>
</table>

Channel 1 should be used at all time except for emergencies
Safe Driving Policy

The MGIO Council endorsed the following policy for all users:

All new personnel that travel to MGIO are required to complete a safe mountain driving orientation session online and sign a statement that they understand their responsibility to drive safely on AZ State Route 366 and the Access Road.

The orientation will include an introduction to MGIO policies and procedures, a power point presentation concerning mountain travel and driving skills required for safe operation on a high-altitude mountain road.

Driving Safety and Logistics Refresher Course (arizona.edu)
Penalties

All penalties are under the control and direction of each Observatory Director

1) Verbal warning and safety driver class
2) Written warning including notation in annual performance review
3) Revocation of driving privileges for three months and placed on probation status

If needed due to the severity of the infraction, the penalty may supersede the policy above. Loss of all driving privileges and additional penalties up to and including discharge from employment.
Driving at night is always highly discouraged. If you must travel from sunset to sunrise, please use a buddy system with a minimum of two occupants per vehicle or use a convoy of vehicles equipped with two-way radios. You should always be able to contact another local person during your travel up or down the mountain. Each observatory control room has a two-way radio to assist with contact if necessary.
Winter Mountain Driving

November 15 thru April 15

The USFS locks the gate at the end of the pavement to prohibit public access. The access road gate key will allow access to employees and observers.
Snow Plowing Procedures

The Arizona Department of Transportation (ADOT) plows the paved road for snow and ice during the winter and MGI personnel plows the unpaved road up to the observatory site.

For safety reasons, ADOT will block the road while plowing. Employees and observers will be escorted through those areas by ADOT employees during this time every 30 minutes when necessary, so please allow for delays. Upon arrival at the gate or blockade contact Base Camp (Radio Unit # 30), who will alert ADOT of your presence. Be sure to monitor radio traffic during this time for additional information.

During snow plowing, when traveling to or from the observatory advise all MGI personnel via radio that you have passed the gate and will be traveling on the unpaved road. If you should come upon a snowplow – STOP – allow the plow a wide berth (> 100 feet) until you have made positive contact with the driver. The plow driver will then permit you to proceed once the plow has stopped and safely secured.
Preparations and Expectations

A four-wheel drive vehicle with properly sized snow chains for all tires are required for travel in the snow. [OIA Video Streaming (arizona.edu)](arizona.edu)

Each vehicle will be equipped with a survival pack as defined in the Steward Observatory Safety Manual, Policy # 42. [sosm42.pdf (arizona.edu)](arizona.edu)

Black ice or packed snow can cause extremely hazardous road conditions.

“Soft” shoulders on both sides of the road surface can result from snow plowing, remain centered on the road to avoid getting stuck.
Ice and Snow Fall from Buildings

During winter operations at the observatories, be aware of snow and ice accumulation on all building(s), including but not limited to the microwave antenna located at the south end of the Vatican Observatory.

Any person(s) walking near the outside perimeter of any building should be alert at all times. Snow and ice fall may cause damage to people and/or vehicles parked near the buildings.

Be extra cautious around the SMT as the roof panels are open.

Photo Credit: Steven Harmon
When Action Is Needed

**Emergencies**
Dial 911
Call “MAYDAY” over the radio three times over radio, then state the emergency.

**Non-Emergency**
Call the UA On-Call Physician at 520-694-4222, inform them you are calling from the telescope on Mt. Graham for the on-call physician. Call Dr. Chris Williams directly at 520-247-2633 (For non-emergency medical advise or off-site transport recommendations)
UA Nurse Triage for workplace injuries ONLY 800-628-2877
During your stay you should expect to find a clean facility.

Custodial Services are provided:
Monday – Friday
10 a.m. to 2:45 p.m.

Base Camp Hours
6 a.m. to 4:30 p.m.

Please call
(928) 428 – 2739
Or email dornelas@arizona.edu
for questions, concerns or additional information.

Please leave a message after 4:30 p.m.
Emergency telephone numbers are posted near each telephone.
Please sign in with the length of stay at the message center found in the entry area of each of the buildings.

**ONLY** use bottled water for drinking, cooking and to refill the ice trays. SMT/VATT bottled water is found in the entry area; contact Base Camp for refills. LBT bottled water is found in the kitchen.

Each Kitchen is supplied with all necessary items to accommodate you during your stay (cutlery, dinnerware, etc), coffee and basic condiments.

Each person is required to supply their own food for the duration of their stay. **Please do not leave food out;** store all food properly (Precautionary pest control efforts). In addition, each person must prepare their own meals and clean up after themselves. All food should be labeled with your name/initials and the date. Prior to departure all unwanted food should be discarded. If you wish to leave for another user, label it as “free”. This applies to food in the cabinets, refrigerator and freezer.
When using the following:

Stove – DO NOT leave unattended while preparing meals. Use lids and/or splatter screens. Clean any food residue after use.

Oven – Cover dishes with aluminum foil when possible

Microwave – DO NOT use metal or aluminum in this appliance. Cover dishes to avoid spills/splatters.

Small appliances – turn off or unplug when necessary

All linens, towels, pillows and blankets are stored in the closest. Extra linen and towels are stored in linen cabinets. Laundry service available for these items only.

Trash pickup is Monday through Friday. Overflow is to be placed in the large trash container in the entry area. DO NOT place trash outside of the building.

Upon departure:

LBT and VATT – remove soiled linens from bed. Place linens and towels outside of the door. LBT guest shall vacate rooms by 10 a.m.

SMT – soiled linens and towels shall be placed in the hamper

If linens are not removed the room will be considered occupied.

The MGIO Custodial Department thanks you for your cooperation!
## Emergency Contacts

<table>
<thead>
<tr>
<th>Contact</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UA Police Dispatch</td>
<td>520-621-8273</td>
</tr>
<tr>
<td>Graham County Sheriff Dispatch</td>
<td>928-428-0808</td>
</tr>
<tr>
<td>Mt. Graham Regional Medical Center</td>
<td>928-348-4000</td>
</tr>
<tr>
<td>US Forest Service Emergency Fire Dispatch</td>
<td>520-202-2710</td>
</tr>
<tr>
<td>Wade Boltinghouse/UAPD</td>
<td>928-965-9325/928-348-0001</td>
</tr>
<tr>
<td>Kelly Baker/Emergency Response Coordinator</td>
<td>520-643-2278</td>
</tr>
<tr>
<td>Eric Buckley/MGI O Director</td>
<td>928-965-3004</td>
</tr>
<tr>
<td>David Carroll/Safety Manger</td>
<td>520-419-3106</td>
</tr>
<tr>
<td>Shane Olsen/MGI O Operations</td>
<td>928-965-3202</td>
</tr>
<tr>
<td>MGI O On-Call Duty Person</td>
<td>928-965-3100</td>
</tr>
<tr>
<td>MGI O Base Camp</td>
<td>928-428-2739/520-621-8650</td>
</tr>
<tr>
<td>LBT Summit Manager</td>
<td>928-828-0001</td>
</tr>
<tr>
<td>Elevator Shop/UA Facilities Maint. (24-Hours)</td>
<td>520-621-3000</td>
</tr>
</tbody>
</table>
Emergency Transport Vehicle

MGIO utilizes a decommissioned type II ambulance which is equipped with the basic first aid supplies (blood pressure monitoring equipment, oxygen, backboards, cervical collars, and splints) and radio communications. It is located at the Observatory and available to transport in the event of an emergency; weather that is to transfer to another ambulance, helicopter or make the commute to the local hospital.

A basket stretcher is kept in the medical supply area of the UAPD building for use if needed as well.
Emergency Response Contingency Plan

This plan covers a number of contingencies at the observatories such as:

- Emergency Coordinators
- Medical Emergency Procedures
- Evacuation Procedures
- Fire Response
- Chemical Spills Response
- Material Safety Data Sheets

A copy of the plan is available within all MGIO facilities as well as the website. [MGIO EAP_0.pdf (arizona.edu)](MGIO_EAP_0.pdf)

MGIO updates the plan every two years. If you have any questions or concerns, please contact Base Camp at (928) 428 – 2739.