



Vehicle Operator's Guide

PURPOSE: To establish policies governing the utilization and operation of equipment, in order to maximize the availability of equipment for visitor use, as well as, providing maintenance personnel the opportunity to conduct preventative or unscheduled maintenance. Adherence to this policy allows the Site Director to control the use of equipment. Allowing equipment to be used carries with it the responsibility for both equipment and operator safety. The Site Director must ensure vehicle utilization and operating procedures are understood and followed.

Authorized Drivers of Observatory Vehicles

Smithsonian staff members, Predocs, Postdocs, Graduate Students, and Interns supported with Smithsonian Astrophysical Observatory (SAO) funding:

- ✓ Read Fred Lawrence Whipple Observatory (FLWO) *Vehicle Operator's Guide*.
- ✓ Provided a copy of your driver's license¹.
- ✓ Signed FLWO Driver's Statement and provided to the Site Director.

Employees of a Collaborating Institution or University

- ✓ Read the FLWO *Vehicle Operator's Guide*.
- ✓ Provided a copy of your driver's license.¹
- ✓ Signed FLWO Driver's Statement and provided to the Site Director.

Mt. Hopkins Road

The FLWO road is a mostly unpaved, single-lane mountain road that must be driven with caution and awareness. Because of the nature of the Observatory's geography, an ability to drive on unimproved mountain roads is essential to any effective use of the facilities.

The 17 kilometers from the Administrative Complex to the Observatory Ridge is defined by the Forest Service as a "fair weather, single-lane, access road." If weather conditions warrant, the road will be closed to all personnel and visitors at the discretion of the Site Director.

The road below the gate at kilometer marker 13 is open to the public, so never assume your presence is known to all traffic even with the use of radios.

¹ For residents of foreign countries, the use of a valid foreign driver's license is acceptable. For US residents, the use of a foreign driver's license is not acceptable. Although state laws vary, generally a person relocating-to / settling-in a US state is required to get a valid driver's license from that state within ~1 month of that relocation. After this period their previous driver's license is no longer considered valid. As a federal agency the SAO cannot operate in legal gray areas. Although we do not have the resources to explore every license and every state's regulations, the use of a foreign driver's license by US residents is an obvious problem, and will not be permitted as credentials for operating SAO vehicles.



Road Gates

The Administrative Complex driveway and the Observatory access road at the Ridge all have gates that are operated by entering a code on a keypad or by using a "clicker" installed in most GSA / SI vehicles. Make certain you know the current code and whether or not any additional characters have to be entered to open the gates. The code is required for entrance only; a sensor in the pavement will detect your vehicle when you pull up to exit and open the gate automatically.

Motor Pool Operations at FLWO

FLWO maintains an automotive shop responsible for preventive maintenance, repair, renovation, and fueling of vehicles.

The motor pool has two categories of vehicles:

1) **GSA leased** vehicles (license plate begins with a "G") that are primarily provided for shuttling scientists and daytime staff between the Administrative Complex and mountain.

2) **Smithsonian owned** vehicles (license plate has "SI" on it) that include renovated cars, trucks and heavy mobile equipment. Many of these vehicles are located on the mountain for Observatory users to drive between buildings while other vehicles are used solely by the mountain support staff.

GSA leased vehicles are always parked in secured areas overnight such as inside the locked gate at the Administrative Complex. For vehicles parked on the mountain, the Observatory grounds are secured with a locked gate to prevent outsiders any access.

All GSA leased vehicles and most SI vehicles have a permanently mounted digital radio. When driving any other vehicle, make use of the hand-held radios available at the Administrative Complex.



Your Responsibilities as an Operator of a SI Vehicle

DO	DO
<ul style="list-style-type: none"> • Conduct a visual inspection of the vehicle. • Check (at a minimum) engine oil, brake fluid, and coolant levels. • Start the vehicle and ensure you have ample fuel. • Ensure vehicle has an operational radio. Secure a handheld radio from the Administrative Complex if one is not installed. • Fasten your seatbelt. This not optional! See SI Directive 421. • Announce your departure from the summit, bowl, ridge, or Administrative Complex to alert other traffic on the road. • Observe kilometer markers on the road so you can announce your location to other traffic. • Check on road conditions during rain or snowstorms. Ask staff at the Administrative Complex during business hours. During non-business hours, call 520-879-4422 to listen to a recorded message. At all times, use common sense regarding a trip up or down the mountain. • Use 4 - wheel drive vehicles during continuous, heavy rainfall or snow storms. Make certain you know how to operate the particular 4WD system the vehicle has prior to driving on the mountain. If the vehicle User's Manual is missing from the vehicle, ask a staff member. • Drive at a safe speed. Above the Administrative Complex, the speed limit is 15 mph or 20 mph, depending on the section of the road. This is the maximum speed on straight parts of the road under ideal conditions. When driving around curves or under bad road conditions, the maximum safe speed may be 5 mph. Also, drive in the middle of the road. The radios are equipped with GPS receivers and the data are automatically transferred to a central server. Random checks on the GPS data will be performed on a regular basis. In case of a complaint for 	<p>reckless driving or in case of an accident, the data will be analyzed.</p> <ul style="list-style-type: none"> • Give the right-of-way to large trucks hauling equipment or materials regardless of their direction. Use the radio to communicate and offer to park and wait at a wide area in the road. • Make an effort to car pool with other scientists and staff who need to travel to and from the mountain. In particular, adhere to shuttle times from the Administrative Complex to the mountain (see section entitled "Shuttles". Shuttle times are posted on the board in the lunchroom at the Administrative Complex. • Utilize engine braking when driving downhill to prevent needless wear on the brakes and to keep them from overheating. Complete brake loss may occur if brakes overheat. Begin your decent in the lowest gear. If the lowest gear provides too much engine braking, shift to the next highest gear. • [change] When staying on the mountain, hang vehicle keys on the boards located inside the Ridge and Summit dorms. Place them on the hook that corresponds with your room number. The mountain support crew may need access to vehicles during snowstorms for plowing. • [change] Place keys into one of the drop boxes located at the Administrative Complex once you return to base. • Report to the Site Director, 879-4419, if you ride with or observe an irresponsible driver. Names of staff or visitors making reports about reckless drivers will be kept confidential. • [change] Report any maintenance issues to Motor Pool Personnel. Place Equipment Fault Form (found in glovebox) & keys in one of the drop boxes. Drop boxes are located outside the entrance of the Admin Complex and Motor Pool Office.



DO NOT	DO NOT
<ul style="list-style-type: none"> • DO NOT SMOKE. Smoking is not permitted in any SI/FLWO vehicle or building. • DO NOT DRINK alcoholic beverages before or while operating any Observatory vehicle or equipment. This includes dinners at meetings and conferences. • DO NOT DRIVE UNDER THE INFLUENCE. SI maintains a zero-tolerance policy for operation of SI motor vehicles by operators who are under the influence of alcohol, controlled substances, or prescribed medications that may cause drowsiness or that warn against operating motor vehicles. • DO NOT use cell phones for calls or texting while driving a vehicle. 	<ul style="list-style-type: none"> • DO NOT leave the keys in the vehicle. Place keys on the room key hook in the Ridge and Summit dorms or in one of the drop boxes at the Administrative Complex. • DO NOT use the vehicle for private business, personal errands, or recreation. Avoid creating any perception of misuse. Reported incidents of misuse often result in disciplinary actions. • DO NOT transport members of your family, personal friends, or non-Government employees in the vehicle without specific permission from the FLWO Site Director or designee. • DO NOT use the vehicle for transportation to or from work or park it at your residence without valid written authorization.

Revocation of driving privileges and disciplinary actions

If you ride with or observe a reckless, careless, or irresponsible driver, report the episode, in writing (e.g. email) to the Safety Officer or to the Site Director. The names of those making reports will be held in confidence. Once an unsafe driver is identified, the three-step revocation process described below will be started. This applies to all permanent staff members, as well as visiting scientists.

- * **First incident:**
Warning letter to employee and supervisor.
- * **Second incident:**
Suspension of driving privileges for 30 days.
- * **Third incident (within one year of suspension):**
Revocation. Reinstatement is possible, but not guaranteed, after completing an approved driving safety course.



Shuttles

Two shuttle vehicles will be available for transportation between the Administrative Complex and the mountain during the day and one will be available during the night at the listed times. For the day shuttles, one will go to the MMT (Mike Alegria/Ricardo Ortiz) and one to the ridge (Ted Groner/Wayne Peters). **DO NOT** leave the site before the listed time. Plan ahead and take one of the regularly scheduled shuttles. The Motor Pool cannot guarantee a vehicle will be available for you if you miss the shuttle.

Day Shuttle (Monday – Friday)

Leave Administrative Complex	Leave Ridge
8:15 AM	3:45 PM by arrangement

Evening Shuttle (Daily)

	Lv Office		Lv Office
Jan	4:15 PM	Jul	6:15 PM
Feb	4:45 PM	Aug	5:45 PM
Mar	5:15 PM	Sep	5:15 PM
Apr	5:45 PM	Oct	4:45 PM
May	5:45 PM	Nov	4:15 PM
Jun	6:15 PM	Dec	4:15 PM

Personnel utilizing the shuttles can change the times by making internal arrangements.

Personal or rental cars may be driven to the telescopes, weather and road conditions permitting. Check road conditions and weather forecast with the office first. Remember that bad weather can trap an ordinary car on the mountain. Beware of the last 400 feet of road to the MMT. If your car has had trouble making the climb to this point, do not attempt the last grade. Instead, park at the Bowl and take one of the Observatory vehicles provided for inter-building transportation.

[Addition] In order to facilitate the tracking of equipment, vehicle keys will be placed in one of the two drop boxes located at base camp at the conclusion of every trip off the mountain or end of shift. One drop box is located outside the staff entrance of the Administrative Building. The second drop box is located outside the Motor Pool Office door. The only exception to this is the permanently assigned vehicles listed in the below table:



VEHICLE #	LICENSE #	MAKE	MODEL	OPERATOR
170	SI-123	WILLY'S	JEEP	VERITAS
190	SI-135	CHEVY	K2500 4X4	VERITAS
196	SI-140	FORD	F350	MOTOR POOL
208	SI-147	JEEP	PATRIOT 4X4	PROJECT MANAGER
209	SI-145	CHEVY	COLORADO	MAINTENANCE
215	SI-159	FORD	F250	MAINTENANCE
216	SI-160	FORD	F250	MAINTENANCE

Reserving A Vehicle

Vehicle reservations may be requested on a “first come, first serve” basis. If you would like to reserve a vehicle for a specific function, contact the Motor Pool Supervisor at (520) 879-4425 or email (preferred) at gary.sarapa@cfa.harvard.edu. Please be prepared to provide the following information:

- ✓ Your name and phone number or email.
- ✓ Dates and times required.
- ✓ How many personnel will be traveling with you.
- ✓ Any special requests. I.E. a specific make/model.

What to Do if You Have an Accident

Take Necessary Emergency Action

Accidents happen. If you are involved in an accident, try to stay calm and take the following actions:

- DETERMINE IF SOMEONE IS INJURED. Radio to the Administrative Complex during business hours. (During non-business hours, radio to the mountain top and call on a cell phone if available. In case of any injuries, call 911 on your cell phone).
- Once the medical emergency is under control, report the accident to the Motor Pool, or the Site Director, or the Safety Coordinator:
 - Motor pool: Scott Sarapa (520) 879-4425 [office], (520) 879-4410 [cell]
 - Site director: Pascal Fortin (520) 879-4419 [office], (520) 288-2311 [cell]
 - Safety coordinator: Tom Gerl (520) 879-4411 [office], (520) 665-8455 [cell]



Do not sign or make a statement as to responsibility.

Get the facts including registration, permit, insurance, local details, and witnesses. (See Section – Get the Facts – below.)

- Complete the Accident Report Kit (see “Accident Report Kit” section).
- Notify county authorities, as required by law.

Do Not Sign Or Make A Statement As To Responsibility

Cooperate with the local sheriff. However, any formal statement should be made to your supervisor or to the Government investigator. Be courteous. Do not engage in arguments at the accident scene. You may provide your valid motor vehicle operator's license or permit information if requested by police, investigating officials or other drivers involved in the accident. Be aware that registration, licensing, and insurance requirements differ from requirements for privately owned vehicles. For instance, all SI/FLWO vehicles are not insured because the Federal Government is a self-insurer. The FLWO staff will be able to assist you if you have questions.

Get The Facts

Having all the facts is essential when reporting an accident. The best time to collect these facts is at the scene of the accident after all necessary emergency actions have been taken. At this time, witnesses are present and your memory is fresh. The following facts are crucial and will be needed when filling out the accident report described in the next section.

- Registration information on all other vehicles involved;
- Permit and insurance information from all other drivers involved;
- Names and addresses of all persons involved in the accident and the extent of injuries;
- Details on the location, time, measurements, weather, and damage;
- Names and addresses of any witnesses. (Third party witnesses are most helpful.)

Commercial drivers

If you have a commercial driver license (CDL), make sure you have read the Smithsonian Directive 218. There are clear procedures to follow with regards to drug testing in case of an accident.

Accident Report Kit

For your convenience, a kit containing required forms for reporting a vehicle accident is located inside the glove compartment. Report your accident using this form to the FLWO Site Director and your supervisor within 24 hours after the accident. Your agency is responsible for submission of all required forms if you are injured and unable to comply.

- SI Form 3712, *Vehicle Accident Report* – Vehicle operator must complete this form at the time and scene of the accident, if possible. The form needs to be completed for all FLWO vehicle accidents.
- Standard Form 91, *Motor Vehicle Accident Report* – This form needs to be completed for all GSA leased vehicles at FLWO in addition to SI Form 3712.
- Standard Form 94, *Statement of Witness*



NOTE: Form CA-1, *Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation*, is not included in this kit, but is available from the FLWO office, or from your supervisor. This form is filled out, if applicable, by the injured party or by someone acting on the person's behalf and submitted to their immediate supervisor within 24 hours.

Form CA-1 should only be completed by Federal and Trust fund employees of the Smithsonian Institution and visiting employees of other Federal agencies. Visiting scientists need to contact their respective institutions.

Remember that these forms usually can be avoided by slowing down and paying attention as you drive the Mt. Hopkins Road.

What To Do If You Have Vehicle Maintenance Issues

[Addition] If you find a problem with your vehicle but it is still safe to drive:

- Drive vehicle to the Motor Pool. Fill out the Equipment Fault Form (found in the glove box) and give the form and vehicle keys to one of the maintenance personnel.
- If maintenance personnel are not available – Park the vehicle outside the Motor Pool. Fill out the Equipment Fault Form (found in the glove box) and place the form and vehicle keys inside the drop box located outside the Motor Pool Office door.

Official SI documents

These documents are available on the SI web site (<http://prism2.si.edu/Pages/Home.aspx>).

Smithsonian Directive 421: Motor Vehicle Management

Smithsonian Staff Handbook SSH 421: Companion document to Smithsonian Directive 421

Smithsonian Directive 218: Drug and alcohol testing and medical examinations for commercial Drivers.

Created: February 2005.

Updated: March 2018