

University of Oklahoma
Gallogly College of Engineering

ExxonMobil Lawrence G. Rawl
Engineering Practice Facility (REPF)

Safety and Operations Manual

Preface

It is the goal of the staff of the ExxonMobil Lawrence G. Rawl Engineering Practice Facility (REPF) to provide a safe, educational, productive, and exciting environment for engineering students to extend their education through hands-on and mind-on projects in a “real-world” environment. We seek to allow freedom and flexibility while maintaining a safe, respectful and pleasant learning environment. It is crucial that all students engaging in the activities of this facility be mindful of their own safety as well as the safety and enjoyment of those around them.

Pertinent Policies of the University of Oklahoma

All students using the REPF are required to be enrolled and in good academic standing, attend safety training annually, You will need to attend training during posted times throughout the first semester, complete proper paperwork, passed the safety quiz, and have read and be familiar with the following documents. **To use the machine shop, you must spend a minimum of three hours training in the machine shop per machine. If you are not an active participant on the team, machine shop training will need to be done again when you show up in subsequent years.** Behavior while in the REPF should reflect the requirements of these policies at all times. **If the any of the rules and policies below or in this safety manual cannot be followed, your access to the REPF facilities may be revoked and you may also be removed from the team.**

- List of University of Oklahoma Student Policies – <https://www.ou.edu/studentconduct/students-rights-and-responsibilities>
- Title IX Policy – <https://www.ou.edu/eoo/about/title-ix>

Personal Property

Personal property left in the Rawl Engineering Practice Facility will be taken to surplus or recycling. This includes but is not limited to furniture, bicycles, kitchen appliances, personal tools etc. Cars and motorcycles left inside the building will be subject to tickets and be towed.

REPF Staffed Hours

Monday – Friday: 9:00am to 8:45pm (during Fall/Spring semester)
Saturday: 10:00am to 4:00pm (during Fall/Spring semester)
Sunday: Closed

REPF might be closed during breaks, holidays, or for other reasons. Please reach out to Jimmy Cannon (jimmyray@ou.edu) for questions about hours of operation.



Do Not Prop Building Doors Open

Gaining REPF Access and REPF Training Policy

REPF bays and facilities are intended for the use of competition teams registered with the Gallogly College of Engineering and students that would like to gain access to these facilities are required to be a member of a team. This section will cover how students can join a team, complete required paperwork and quizzes, and how they can enter the facility.

1. **Joining a team**

- a. Students that are interested in joining a team must contact the appropriate team leadership on becoming a member. The team's contact information can be found on the college's website and through the team's social media and Engage portal.
- b. Each team has its own requirements and processes for new members that you will need to do in order to join. Generally, all teams are open to all currently enrolled OU students at any skill level.

2. **REPF Safety quiz and facility use forms**

- a. After joining a team, students are required to complete the REPF safety quiz and facility use forms. These are digital forms created by REPF staff to ensure that students complete all appropriate paperwork to use the facility and have a strong understanding of the rules policies and procedures in the building.
- b. **All team members, new or returning, are required to complete the safety quiz and facility use forms annually for each academic year they are on the team.**
- c. Links to the quiz and forms are kept and distributed by competition team officers and advisor.
- d. Students will first complete REPF Facility Use Forms. These forms include OU's Waiver and Release of Liability Form, the Medical Form and Release, the OU Talent Release Form, Acknowledgement of Student Travel Policies and general Gallogly College of Engineering guidelines for traveling student groups.
- e. Once the forms are completed, students will be required to complete the REPF Safety Quiz. This quiz will cover all of the material in the REPF Safety Manual. Students will be required to earn a 100% to pass the quiz. The quiz will not allow you to continue unless every question is correctly answered on each page.
- f. Upon completion of forms and quiz, the student will be emailed confirmation that they have completed the forms. The REPF Coordinator and Engineering Student Life Coordinator will also be alerted.

3. **Check-in and entering the REPF Bays and Machine Shop**

- a. Once the quiz and forms are completed, students will be allowed to enter the machine shop and REPF bays through the machine shop entrance on the south side of the building during normal business hours.
- b. Students that enter through this entrance will be required to check-in at the Excel sheet near the entrance, entering their name, ID, and what team they are on.
- c. Throughout the day, the REPF staff will check the list to make sure that everyone inside has completed the forms and quiz.
 - i. If a student is found to have not completed the quiz or forms, they will be asked to leave and come back once they have completed the forms and quiz.
- d. When students are leaving, they do not need to check-out with REPF staff.
- e. Students using REPF facilities are expected to primarily work during staffed hours and be finished working and leave before midnight.

4. **Card Swipe Access to REPF Bays and Bench Lab**

- a. Card swipe access to the bays and bench lab is available to team members that need access to work on team projects independently or outside of staffed hours.
- b. Swipe access is primarily given to officers within the team and team members by officer request.
- c. Members that are interested in gaining card swipe access must be active on the team and access must be requested by the team leadership or advisor to the REPF Coordinator.

- i. Per the college, active members are considered to be students on a team that are consistently involved with their team and are actively contributing as a member through work on the project, learning new skills, or working with the team in an organizational capacity.
 - ii. **All students with card swipe access must be compliance with all OU, GCoE, and REPF policies and procedures, including the completion of the REPF safety quiz and facility use forms.**
 - iii. **Card swipe access requests from anyone that is not team leadership or advisors will not be considered**
 - d. Card swipe access will be removed for the following reasons:
 - i. Students that have committed REPF policy violations repeatedly or in a serious manner
 - ii. Students that have violated OU Student Code of Conducts while inside or using REPF facilities.
 - iii. Students that are no longer active on the team
 - iv. By request for the team leadership and/or advisor
 - e. Machine shop card swipe access is not generally available to students. Officers and advisors can work with the REPF Coordinator on obtaining temporary afterhours access to the machine shop for the team's benefit.
 - i. Teams making this request must have a specific need and plan for the machine shop afterhours use.
 - ii. Only specific students within a team will be allowed machine shop access at the discretion of the REPF Coordinator. Unauthorized members are not allowed to use machines afterhours.
 - iii. Machines must be cleaned, and tooling removed from the machine after use.
5. **Active member roster and swipe access audits**
 - a. Every month, team officers are required to submit a roster of active members to REPF staff. This is checked with the list of students that have completed their safety quiz and facility use forms as well as previous rosters.
 - i. Students that are not active, but have card swipe access, will lose their card swipe access due to no longer being active members.
 - ii. **Teams that submit a roster with members that have not completed their safety quiz and facility use forms, will lose card swipe access for the whole team until a corrected roster is submitted and all students on the roster have completed the quiz and forms.**
 - iii. Card swipe can be returned to an inactive member that becomes active again.
6. **Machine Shop Use and Training Office Hours**
 - a. Students interested in using the machine shop facilities are required to be trained on them. In order to be trained on the machines, students must do the following:
 - i. Be a member of a competition team by passing the safety quiz and facility use forms
 - ii. Be on the active member roster for a team
 - iii. Receive at least three hours of hands-on training with shop personnel per machine on the machines they wish to use in the shop
 - b. To receive training, students can attend REPF Training office hours. These are posted on the main REPF website.
 - i. Each training will be for several hours where students can work on the things they need to do for their team, gaining training on the tasks they will be performing for the team.
 - ii. Each training session will cover different machines
 - c. Trainings are only offered during the Fall semester
 - d. Machine Shop access can be taken away for the following reasons:
 - i. Students that have committed REPF policy violations repeatedly or in a serious manner
 - ii. Students that have violated OU Student Code of Conducts while inside or using REPF facilities.
 - iii. Students that are no longer active on the team
 - iv. Students that break machines due to negligence or inability to follow REPF procedures

General Safety and Operating Procedures

Remember, the safety of all persons in the REPF should be the first priority of everyone working and observing the practice activities.

1. A copy of this Safety and Operations Manual will always be available in the Machine Shop and the REPF web page.
2. New and active competition team members will need to work with their team leads to gain access to the bays and bench lab. To work in the bays, new and returning active members will need to:
 - a) Be enrolled and in good standing with the University of Oklahoma and the Gallogly College of Engineering
 - b) Pass the online safety quiz
 - c) Complete the Waiver and Release of Liability, Medical Form, OU Talent Release, OU Student Travel Acknowledgement, and the Safety Operating Agreement pledging that they will follow the guidelines herein.
3. Card swipe access is given by the REPF Coordinator at the request of the team officers and/or advisor.
 - a) Team leads will submit member names to the REPF coordinator and Engineering Student Life Coordinator.
 - o Only active members according to team leads and/or advisor will be given access.
 - o Members must be enrolled and in good academic standing with the University of Oklahoma.
 - b) Members who wish to use machine shop equipment must be individually trained by REPF Coordinator or shop personnel for a minimum of 3 hours on the equipment they wish to use. **Members are not allowed to use equipment that they have not been trained to use.**
 - c) If ANY team member is observed violating any REPF rules, they will be asked to leave until they meet with the REPF coordinator. Corrective action will be discussed and the team members retrained as required.
4. Team leads will be required to submit a monthly roster of active members to the REPF Coordinator and Engineering Student Life Coordinator. Students that are not listed as active members on the roster will lose card swipe access.
 - a) Students listed on roster but have not yet completed the steps to gain access will be required to do so and the team leads will be alerted by REPF staff.
 - b) **Card swipe access will be removed for the entire team during this time until a corrected roster is submitted and all students on that roster are verified to have completed their quiz and forms.**
5. **DO NOT PROP DOORS OPEN**
6. All individuals working or observing in the REPF must conduct themselves in a manner conducive to safety and learning.
7. **You are responsible for safety and security while in the Machine shop, labs, and bay area inside the Rawl Engineering Practice Facility.**
8. No person may be in a REPF controlled space while under the influence of alcohol, narcotics, or any prescription or non-prescription drug, excessively stressed, tired, ill, or which might affect their ability to work in a safe and alert manner.
9. All REPF controlled spaces are behind card swipe access doors. Team members without card swipe access can enter the bays or shop during normal staffed hours through the machine shop entrance.
10. **All REPF spaces are intended to be workspaces for competition team projects, not general study areas, personal storage spaces, or workspaces for individual projects.**
11. Each piece of equipment in the machine shop, bays, and bench labs have specific safety and operating guidelines posted on the wall near the equipment or on the container or toolbox. Those guidelines shall be followed at all times in addition to the guidelines contained within this document.
12. **Students** in the machine shop and practice bays must be familiar and understand the safety manual.

13. **UNAUTHORIZED** operation of team projects, including starting engines, in and outside the bays and dyno room is forbidden at all times. Teams must gain approval prior to operating team projects through both the REPF Coordinator, [Jimmy Cannon](#), and the Recruitment and Outreach Coordinator, [Dalton Brasington](#).
 - a) **Card swipe may be removed for students that operate a team project without authorization.**
14. While working in the bays, be respectful of tours or University events happening in the building.
15. All aisles and walkways shall be kept clear of clutter. Backpacks and other personal belongings should be stored elsewhere. The REPF facilities are not intended for storage. Items not being used should be stored elsewhere.
16. All individuals working or observing in REPF should familiarize themselves of the location of fire extinguishers, first aid equipment, and fire exits at all times.
17. Housekeeping: **YOU ARE RESPONSIBLE FOR CLEANING UP THE MESS YOU MAKE!** Privileges may be revoked for failure to clean area or equipment that you use. Sweep and pickup after yourself. Lack of housekeeping is a safety hazard.
18. Before transporting the compressed gas cylinders, the cylinder cap shall be screwed on and no fewer than two people shall move the cylinder. When disconnecting cylinders make sure the main valve of the cylinder is OFF. Before attaching a regulator to a cylinder, slightly open the main valve and let it seep slowly while attaching the regulator. This is to clear dust which may become lodged in the threads and cause a dangerous leak once the regulator is under pressure.
19. Compressed gas cylinders shall always be stored chained to a storage rack or chained to a piece of equipment on which they are being used.
20. **Organization** is important in the REPF. The REPF is used daily in recruiting prospective students as well as business leaders, and various other guests that may tour this facility. Keeping REPF facilities picked up, clean, and organized helps us keep a safe and productive environment as well as help our teams track inventory for orders.

General REPF Dress Code

1. All students, staff, faculty, and guests are required to wear clothing appropriate to a shop environment at all times while inside the yellow lines of the bay areas, dyno room, bench lab, and in the machine shop.
2. **Safety eyeglasses shall be worn inside the yellow lines of the bays, bench lab, dyno room, and machine shop**
3. Appropriate protective equipment shall be worn when operating machines or tools
4. Items which are not allowed include but are not limited to the following:
 - a) Open-toed shoes/sandals
 - b) Jewelry (rings, bracelets, earrings and watches should be removed; necklaces tucked into clothing, etc.)
 - c) Shorts
 - d) Long hair (long hair must be tied back behind head)
 - e) Hanging clothing/tattered clothing (clothing which hangs, or which is tattered and presents a fire hazard or might be caught in equipment shall not be worn)
 - f) Revealing, offensive, or otherwise inappropriate clothing shall not be worn

Students that are not appropriately clothed for a shop environment will be asked to leave by staff.

Practice Bay and Bench Lab (REPF B2) Safety and Operating Procedures

1. The practice bay area is not intended to house and display competitive projects. **The team is allowed one previous years' project that is still operable, and the current project that is being built.**
2. All work areas shall be kept clean, useful, and presentable.
3. Individuals working in the practice bay areas should be mindful of their proximity to other workers and observers at all times and adjust their activities accordingly.

4. The bays may be closed for certain events. Teams will be given advanced notice.
5. All tools and other items that are used need to be returned to their designated place by the individual that is using them before he or she leaves the shop.
6. Personal tools must be approved by the REPF Coordinator before being used in the REPF. Certain tools may not be allowed in the REPF due to safety issues.

Machine Shop Safety and Operating Procedures

1. **It is imperative that you understand how to safely operate the machine that you are wanting to use.**
2. Competitive team participants that use machine shop machines will be required to log a minimum of three hours with the REPF Coordinator or Machine Shop staff on the machines they want to use.
3. All operations which involve machine shop equipment including hand tools must be conducted in accordance with the Machine Shop Safety and Operating Procedures.
4. No person is allowed to operate equipment in the machine shop alone. **2 people are required (buddy system)**. Another person must be within reach or within a safe communicable distance to provide help should a problem arise.
5. **While operating a machine, it may not be left unattended.** The power must be turned off and the machine reset before leaving to do another task.
6. Do not move, disconnect, or work on machine shop equipment. Shop personnel will maintain and repair equipment.
7. All REPF machines may be used by appointment after staffed hours.

Canoe Bay Area Operating Procedures

This includes anywhere in the Rawl Engineering Practice Facility where working with hazardous products that require respirators, proper clothing and eye protection is to be used.

It extremely important that those using the facilities of the Rawl Engineering Practice Facility to practice safety and protect themselves against hazardous materials that may be used. Due to the danger and exposure of the materials and products used in these areas strict precautions need to be taken at all times. Material Safety Data Sheets (MSDS) are available for the known products that are used in these areas. The Material Safety Data Sheets of the materials that you use have the precautions listed that should be followed and the proper **Personal protective equipment (PPE)** that will minimize exposure to hazards and injuries. Students using the bay that houses the concrete canoe team and CNC router should practice precautions at all times when entering the bay. The concrete canoe team uses Portland cement, microspheres, and fly ash and other hazards in this area. CNC router is used to cut wood, MDF board and foam all of which can cause inhalation hazards. The material safety data sheets listed have personal protection regulations that must be followed. Team members are responsible for making themselves aware of the MSDS sheets and the personal protection regulations that must be followed. This includes respiratory protection, skin and eye protection. This bay also has an area to lay up carbon fiber, sand molds or anything that creates dust or may stain the floor. Due to the nature of the products used in this area and other areas you are required to wear NIOSH approved respirators, ANSI approved eye protection, and appropriate clothing. The goal of the REPF is to practice safe measures against possible inhalation, eye contact, and skin contact.

For the CNC Router available for use in the bay:

1. The machine will stay locked. Users can check out a key from the machine shop
2. User must wear earplugs and dust mask while operating the machine
3. User is responsible for cleaning the machine during and after use

4. User must turn off the machine after use
5. User must give a detailed time period that they plan on using the machine.

Dynamometer Testing Room Safety and Operating Procedures

1. All individuals conducting testing in the dyno room must wear appropriate hearing and eye protection. Hearing protection must consist of ear plugs, earmuffs or both. This hearing protection will be provided by the REPF Coordinator.
2. If there are safety issues or concerns regarding safe use of equipment in the dyno room, the faculty advisor, team safety officer, and the REPF coordinator will meet to discuss a plan to address the concerns.
3. Teams using the dyno room should consider the following prior to running engines in the dyno room:
 - I. Fire safety precautions including emergency evacuation procedure
 - II. Mechanical failure safety precautions including emergency engine shutdown
 - III. Pre-run mechanical inspection check list
 - IV. Start-up check list
 - V. Test procedure check list
 - VI. Shut-down check list
 - VII. Post-run mechanical inspection check list
 - VIII. Room clean-up check list
4. Any testing done in the dyno room must be communicated to the REPF Coordinator and the Director of Outreach and Recruitment. **Unauthorized testing of any kind will result in loss of dyno room privileges.**
5. This area is not to be used as storage. It is a work/testing area only.

Injury Procedure

In the event of an injury, persons aiding the injured person should use the following steps:

- a. Determine the severity of the injury. If the injury is serious call 911 immediately after stabilizing the situation.
- b. If the injury involves equipment in operation, turn the equipment off.
- c. If there is a blood spill, or any other bodily fluid, latex gloves should be used before administering aid. (See Blood Borne Pathogen Information Packet). Do not clean up a blood spill unless you have been specifically trained to do so.
- d. In the event of a blood spill or spill of any other bodily fluid, notify the REPF Coordinator as soon as the situation has been stabilized.
- e. First aid kits are available in the machine shop and practice bays.

Chemical Spill Procedure

In the event of any chemical spill (acids, bases, organic solvents, oil, etc.) the following actions shall be taken:

If the spill is isolated to the floor only:

- a. Notify the REPF Coordinator
- b. Locate the spill cleanup kits in the Machine Shop Tool Crib
- c. Notify other facility users of the spill by placing signs around the area
- d. Contain and clean the spill using appropriate materials/methods
- e. Dispose of the spilled material in the proper fashion. REPF Coordinator will dispose of Hazardous materials

If the spill is on a person:

- a. Notify the REPF Coordinator
- b. Determine the type of chemical. If the chemical is acidic, alkaline, caustic, or otherwise an irritant, proceed to the eyewash station/chemical shower and flood the affected area for several minutes.
- c. If the chemical **IS NOT** alkaline, caustic, or otherwise an irritant, clean the affected area with soap and water to remove the spill.
- d. If a person is unable to locate the eyewash station/chemical shower, they should notify those around them, and other patrons should help that person to the station. Those giving aid should be cautious of the chemical involved and be careful to not affect themselves.

Fire Prevention/Hazardous Materials

The machine shop, practice bay areas, and bench lab areas contain chemicals, materials, and processes that are flammable or can cause fire. With some simple guidelines fires can be prevented easily, maintaining a safe environment. The guidelines below should be followed at all times to reduce the likelihood of fire.

1. There is NO SMOKING allowed in the practice facility.
2. All hazardous materials requiring a safety data sheet will be checked in at the machine shop. Any of these items found that have not been checked in or stored properly will be disposed of.
3. **Never dispose of hazardous materials by way of trash or drain.**
4. Any processes which require heat, or an open flame should be conducted with extreme caution. Always make sure to clear the area of fumes and substances that may ignite.
5. Before any welding or use of an open flame, an audible warning should be used to notify all shop patrons to stow flammable materials in the fire cabinet.
6. Always store flammable materials in the designated yellow fire storage cabinets.
7. When using flammable materials such as solvents, oils, etc. be sure that containers are not left open or unattended.
8. Be sure to expeditiously contain and clean any spilled flammable materials.
9. Any rags or towels which have come in contact with flammable materials should be disposed of in the proper waste containers (marked Flammable). DO NOT mix flammable materials with regular shop trash.
10. Any empty containers which held flammable materials should be sealed or cleaned before disposal.
11. Batteries should be properly stored in the bay area. Batteries should not be in the basement storage.
12. Tires may be stored in the basement storage and can be disposed of when no longer needed. Tires need to be inventoried annually.
13. Material Safety Data Sheet (MSDS) must be in the MSDS book. MSDS must be followed when storing or disposing of hazardous materials.
14. A current inventory of flammable liquids shall be turned in to REPF coordinator to be kept on file for fire marshal

Hazardous materials/chemicals must be checked in at the machine shop office and SDS turned in for records.

Fire Response

Although the facility is equipped with fire detection and extinguishing systems, patrons should attempt to contain and extinguish fires as soon as they are detected. **The facility is equipped with manual fire extinguishers which are located by exit doors along with the fire pulls(alarms).** Please familiarize yourself with the location of fire extinguishers and fire pulls. When extinguishing fires, remember the following:

1. For a fire to exist three elements are required:
 - a. Fuel Source – Combustible material
 - b. Heat – A temperature at or above the ignition point of the fuel
 - c. Oxygen – An oxidizer to provide oxygen for combustion. Keep in mind this does not have to be air.
 - d. **To extinguish a fire, you must remove at least one of these three elements.**
2. There are many types of fires. Use of the incorrect type of extinguisher can increase the risk of injury and cause the fire to spread. Make sure that you have the right extinguisher for the materials you are working with. OU fire Marshall will assist with this.
 - a. Class A fires occur in ordinary combustible materials such as wood, rags, cardboard, and trash. Class A extinguishers use water to reduce the temperature around the combustible material and displace the air which is oxidizing the fire. Do NOT use Class A/Water extinguishers on any other type of fire.
 - b. Class B fires occur in flammable liquids such as solvents, oils, grease, paint, etc. Typically, extinguishers used for Class B fires are CO₂ or Dry Chemical. These extinguishers are designed for Class B only, Class C only, or both Class B and C. Make sure that the extinguisher is labeled Class B before using on a flammable liquid.
 - c. Class C fires occur in electrical connections, breaker panels, motors, and electrical wiring. Class C extinguishers are non-conductive. NEVER use water to extinguish an electrical fire. ALWAYS shut off the electrical current before attempting to extinguish the fire.
 - d. Class D fires involve combustible dry chemicals and metals like magnesium, potassium, and sodium. Class D extinguishers are used ONLY for class D fires.
 - e. Class K fires involve vegetable oils, animal oils, and fats. They are typically only found in kitchens. Class K extinguishers are used only for class K fires.
3. When using a fire extinguisher, you must use P.A.S.S. This stands for:
 - a. Pull the pin
 - b. Aim towards the base of the fire
 - c. Squeeze the lever slowly and evenly
 - d. Sweep side to side

Fire Evacuation

If a fire becomes uncontrolled, the first step is to notify the occupants of the building to evacuate. This is done by activating the building fire alarm system. Also, the individual aware of the fire should notify others on the way out of the building and steer them away from the fire location. Upon being aware of a fire alarm all occupants should calmly proceed to the nearest fire exit and carefully exit the building. DO NOT use elevators to exit the building. Locate stairwells and proceed to the ground floor to exit. Occupants should group together in an area away from the building and wait for the fire department to arrive and search the building. **Our primary gathering area is in the courtyard between the REPF and Devon Energy Hall. In case this area is unsafe, the secondary gathering area is in the courtyard between the Carson Energy Center and Felgar Hall.** Keep roads and fire lanes clear for emergency vehicles. It is only safe to enter the building after the fire department has given the all clear.

Severe Weather

The City of Norman maintains a citywide civil defense warning siren that will be sounded in the event of a tornado warning. In the event this happens you should take precautions and move to the basement/tunnel area for safety.

Material Hazards Communication

Materials/chemicals requiring safety data sheets must be checked in at the REPF machine shop office with a copy of the material safety data sheets turned in for record. Materials/chemicals found that have not been checked in may be sent to hazmat for disposal. The machine shop office can assist in disposing of hazardous materials. **Please do this periodically throughout the year!**

Painting

Painting will be done outside of the building. No painting allowed inside the Rawl Engineering Practice Facility. Proper PPE needs to be worn when painting or handling paint.

REPF Bay and Lab Space Allocation Policy

- REPF Bay and Lab space is allocated by the engineering dean's office during the summer.
- Only GCoE approved teams are allocated bay or lab space in the REPF
 - Newly approved teams can use REPF facilities, but will have no bay/lab space of their own
 - Teams with no allocated space can work with other teams to use their allocated space for storage
- Allocations are made at the discretion of the college and total allocated space can be extended, removed, or made the same each year.
- The college can reallocate space if a team becomes inactive, suspended, or if the space is not being utilized.

REPF B-18 Storage Policy

Storage is limited at the REPF. We will work with your team and advisor to assist in your storing needs.

- Primary storage for the teams is in REPF B-18 (in the basement)
 - Storage will be for items, materials, or tools not currently in use
 - Storage of hazardous materials is not allowed in B-18
- Storage areas will be primarily managed by the teams
 - All storage should be clean and organized. There should be no blocked walkways.
- Storage is assigned and renewed annually with the REPF Coordinator in the Spring
 - Total storage space allocation is based on team need and size as determined by the REPF Coordinator
- Teams are expected to keep their items in their assigned space and not in unallocated space or another team's space
- Teams can request more space with the REPF Coordinator
 - Requests will take into account team need, plan for the space, and space available
- Teams are expected to go through their storage at least once an academic year
- Every year, team leadership and the REPF Coordinator will go through the storage space together
 - The space will be cleaned and stored items will be accounted for by the team
 - All stored items not needed will be disposed.
- Storage space may be taken away from the teams for the following reasons:
 - Failure to keep items within allocated storage space
 - Storage of hazardous materials
 - Failure to keep storage area clean and organized
 - Failure to audit storage space with REPF Coordinator
 - Other reasons at the discretion of the college and the REPF Coordinator

REPF Storage Locker Policy

The REPF has day lockers available for student use in the south side of the building near the dock and machine shop entrance.

- Lockers are intended for semester use as needed for students working in the REPF.
- Each team will receive one locker for their member's use.
- Each team captain will receive a combination to this locker at the beginning of the semester from the REPF Coordinator.
- The following are expectations of the student that use a locker:
 - The student/team may store items for the semester they checked out the locker for
 - The student/team will not store any hazardous, dangerous, or perishable items in the locker
 - The student/team must clean out the locker of all items by the last day of the semester.
 - The locker may be checked by machine shop staff throughout the semester without notice
- Additional lockers may be requested by team members to the REPF Coordinator. The REPF Coordinator will assign additional lockers if the team has need and a plan to utilize the locker.
- If items are left in the locker after the end of the semester, the REPF Coordinator will contact team leadership about the items in question. They will have a limited amount of time to pick up the items from the REPF Machine Shop office.
 - If the items are not collected by the time limit, the items will be disposed of
- Teams that repeatedly fail to clean out their locker or use it inappropriately may face disciplinary actions as deemed appropriate by the college including:
 - Meeting that may include advisor, team leadership, REPF Coordinator, and deans
 - Inability to use a locker for the entire team for a length of time as determined by the REPF Coordinator
 - Loss of card-swipe access to REPF facilities

Storage, Sale, or Loan of Old Projects

Besides the project teams are currently working on, teams will need to dispose of or store old projects and components from previous years. These are the following ways that old projects can be handled in the REPF.

Storage

- One prior project may be stored by the team in the REPF, either in the bay, if free of hazardous materials
- Old projects in storage should be in working order prior to being stored
- Stored projects can be used for operator practice, practice with manufacturing and construction, and reference for current projects
- Teams can store additional projects outside of REPF in spaces controlled by the team.
 - The college and REPF Coordinator need to be made aware of additional projects stored outside of the REPF
- The college and REPF Coordinator reserve the right to check on stored projects in the REPF and in other areas.

Disposal

- Old projects may be disposed of at the discretion of the team
- Team officers will need to work with their advisor and REPF Coordinator to make sure that all materials and components of the project are disposed of properly.
- Materials and components can be salvaged by the team and used in current and future projects
- The REPF Coordinator and other teams can take any disposed materials or components that are still usable if the team that owns the disposed project does not want them.

Old Project Loaned to the College

- Old project and components may be loaned to the college for recruitment and display purposes.
- Old projects and components used in this way are stored and maintained by the college for a length of time as agreed on by the college and the competition team
- The loan may be cancelled by the college or team with advanced notice of two weeks
- The college reserves the right to extend the loan period with the team's blessing
 - If the loan is expired, the team will need to dispose or sell the returned project

Old Projects Loaned to External Entity

- Old projects may be loaned to non-University entities at the discretion of the team
- Team will work with their advisor and the external entity to draft a Memo of Understanding (MOU) to detail the terms of the loan including length and responsibilities between the entity and the team for the project
 - All MOU needs to be reviewed and approved by the team advisor
 - MOU details should include length of the loan, transportation of the project to and from campus, what will happen to the project on loan, and a process to extend or cancel the loan
- When the loan expires, the external entity may extend the loan length per the terms of the MOU or return the project to the team.
 - Once returned, the team will need to dispose or sell the returned project

Sale of Old Projects, tools, and materials

- Old projects, tools, and materials may be sold through a public, virtual, and advertised auction (such as eBay).
- Teams will post an accurate listing on the auction site. This listing must be approved by the team advisor.
- Once posted and live, teams will publicize the auction through social media and mailing lists to alumni.
- Once the auction is concluded, the highest bidder will receive the auctioned item(s)
- Once payment is received, the team will need to work with their financial person on getting the funds deposited into their account per OU policy
- The team will keep the bill of sale and send the purchased item(s) to the seller

Title IX Policy and Procedures

Title IX is a federal statute prohibiting sex discrimination. Gender cannot be a basis for a person's exclusion from participation in, denial of benefits, or subjecting him or her to discrimination under any education program or activity, including employment. This includes: admissions, financial aid, academic advising, housing, athletics, recreational services, college residential life programs, health services, counseling and psychological services, registrar's office, classroom assignments, grading and discipline, recruiting for employment or the benefits of employment. The statute applies equally to men and women.

If you are a University employee and you receive information from any faculty, staff or student regarding a possible violation of the Sexual Misconduct, Discrimination and Harassment Policy, you are required to report the information. Provided, however, attorneys, clergy-member, licensed counselors, or physicians, who are engaged in such capacity by the reporting party may keep such reports confidential. OU Advocates is also considered a confidential reporting resource. It is not your obligation to determine whether a policy violation actually occurred. If you receive a report of any sexual misconduct, discrimination, or harassment, you should notify the Institutional Equity Office immediately. In certain types of cases, the University is under an obligation to begin an investigation immediately upon receipt of such information.

Policy Violations Include:

- **Sex discrimination** – Conduct directed at a specific individual or a group of identifiable individuals that subjects the individual or group to treatment that adversely affects their employment or education, or

institutional benefits, on account of sex or gender (including sexual orientation, gender identity, and gender expression discrimination). It may include acts of verbal, nonverbal, or physical aggression, intimidation, or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.

- **Pregnancy Discrimination** – Discrimination on the basis of pregnancy, childbirth, false pregnancy, termination of pregnancy or recovery therefrom. Discrimination on the basis of pregnancy should be reported in accordance with this policy. Employees with questions regarding accommodations during pregnancy are encouraged to contact the Office of Human Resources (<http://hr.ou.edu>), students and visitors with questions regarding accommodations during pregnancy are encouraged to contact the Accessibility and Disability Resource Center (<http://www.ou.edu/drc/home.html>).
- **Title IX Sexual Harassment** – A specific form of sex discrimination that includes the following types of Prohibited Conduct when they occur in the context of the University’s educational programs or activities, and within the United States, that satisfies one or more of the following:
 - Hostile Environment Harassment, which is unwelcome conduct determined by a reasonable person to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to the University’s education program or activity;
 - Quid Pro Quo Sexual Harassment, where an employee of the University is conditioning the provision of an aid, benefit, or service of the University on an individual’s participation in unwelcome sexual conduct; or
 - Sexual Assault, Dating Violence, Domestic Violence, or Stalking as defined below in accordance with applicable law:

Sexual Assault includes:

- **Rape** – penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim;
- **Fondling** – The touching of the private body parts of another person for the purpose of sexual gratification, without the consent of the victim;
- **Incest** – Non-forcible sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law; and
- **Statutory Rape** – sexual intercourse with a person who is under the statutory age of consent.
- **Dating Violence** – which is violence between individuals in the following circumstances:
 - The party is or has been in a social relationship of a romantic or intimate nature with the victim; and
 - The existence of such a relationship shall be determined based on a consideration of the following factors:
 - length of the relationship
 - type of relationship
 - frequency of interaction between the persons involved in the relationship
- **Domestic Violence** – which is an assault and battery against: a current or former spouse; a present spouse of a former spouse; a former spouse of a present spouse; parents; a foster parent; a child; a person otherwise related by blood or marriage; a person with whom the Respondent is or was in a dating relationship; an individual with whom the Respondent has had a child; a person who formerly lived in the same household as the Respondent; or a person living in the same household
- **Stalking** – which is a course of conduct directed at a specific person that would cause a reasonable person to:
 - fear for the person’s safety or the safety of others, or
 - suffer substantial emotional distress
- **Workplace Harassment** – Unwelcome conduct that is based on sex (including pregnancy), and (1) enduring the offensive conduct becomes a condition of continued employment, or (2) the conduct is

severe or pervasive enough to create a work environment that a reasonable person would consider intimidating, hostile, or abusive.

- **Employee Sexual Misconduct** – Employee conduct that occurs outside the context of the educational program or outside the United States, but where the conduct otherwise meets one or more definitions of Sexual Harassment.
- **Sexual Misconduct- Student Code Violation** – Student conduct that occurs outside the context of the educational program or outside the United States, but otherwise meets one or more definitions of Sexual Harassment.
- **Retaliation** – Any attempt to penalize or take an adverse employment, educational or institutional benefit action, including but not limited to making threats, intimidation, reprisals, interference with an individual’s protected rights, or other adverse action, against a person because of participation or non-participation in a report, investigation, or grievance process of Prohibited Conduct.
- **False Reporting** – Knowingly making a materially false statement in bad faith or knowingly submitting materially false information during the grievance process is prohibited. False reporting does not include accidental or inadvertent false statements, immaterial inaccuracies, or statements made outside the context of making a report, filing a grievance, participating in a grievance procedure, or during the grievance process.
- **Violation of Consensual Sexual Relationships Policy** – The Consensual Sexual Relationships Policy may be found here: <https://www.ou.edu/eoo/policies>.

If you have a report of a potential policy violation, you should report it directly to the following:

Institutional Equity Office
Evans Hall
660 Parrington Oval, Room 102
Norman, OK 73019
405-325-3546 | ieo@ou.edu

You can also report a potential policy violation through the online reporting tool found at:
https://cm.maxient.com/reportingform.php?UnivofOklahoma&layout_id=10

More information about Title IX and the Institutional Equity Office can be found online at:
<https://www.ou.edu/eoo/about/title-ix>.

Project Testing

Due to the nature of the projects built in team projects in the REPF, certain specific safety measures shall be taken when testing or operating these projects in and around the REPF or at an agreed upon location. All testing must be done with the prior permission of the Engineering Practice Coordinator and Team Faculty Advisor. The project removal form must be signed by the team faculty advisor and completed and submitted to the REPF Coordinator before the project is taken from building. All participants shall wear appropriate safety equipment/clothing, as prescribed by the event rules that govern the national or international contest for which the product is being prepared. The project must be operated within the contest operations envelope. All testing records are used for future decisions regarding project insurance, testing locations, and other team support topics. **Accurate information about project testing is a necessity for REPF staff.**

1. For projects being tested:
 - a. Team member(s) operating the project, shall be clearly identified and their names and contact information listed on the project removal form

- b. Other team members that are present to witness testing must also be listed on the project removal form
 - c. Projects must pass inspection by Faculty Advisor and REPF Coordinator. All safety systems must be fully operational (i.e. brakes, drive systems, etc.) This inspection must be signed off on the project removal form by REPF Coordinator and Faculty Advisor
 - d. Time, location, date, name of competition team for which the project is being tested shall be listed on the project removal form
 - e. OU Norman Campus Waiver and Release of Liability form shall be signed.
 - f. If insurance is required, the insurance rider shall be attached to the project removal form.
2. **Test Site(s) must be agreed upon by Faculty Advisor and REPF Coordinator.**
 3. A member of the REPF staff shall coordinate, if necessary, with OU Police to assure that the area remains clear of traffic.
 4. Testing in or around the Engineering Quad will be considered on a team need but will be discouraged.
 5. Projects cannot be relocated to an off-campus facility for storage, maintenance, or anything beyond testing and competition.
 6. A project cannot be removed for over 24 hours unless going to competition or if the advisor has approved the removal.
 7. **All University policies and competition rules are in effect while testing and competing.**

REPF Disciplinary Policy

Any misuse of machine shop, bay, or lab space equipment or other violation of REPF, GCoE, or OU policy and procedures will be corrected with a 3-strike disciplinary policy. If it is determined that multiple students on a team or that it seems that the entire team is complicit or aware of the violation, this would lead to team disciplinary procedures. Team disciplinary procedures happen concurrently with individual disciplinary procedures.

The policy is as follows:

Individual Disciplinary Policy

- Strike 1:
 - The student will be notified by the Engineering Practice Coordinator that they have violated the operating agreement. The **student will be given a verbal warning** and thorough explanation of why they are being warned and what the consequences of further violations will be. This meeting may include the Engineering Practice Coordinator, an Engineering Dean, and the team advisor.
- Strike 2:
 - The **student will be placed on temporary suspension and lose their card-swipe access to REPF facilities**. The student will lose their access to REPF facilities and be required pass the safety quiz again before being allowed to use the facility. If the student had card-swipe access, it will also be removed at this time. The length of the suspension and reinstatement of card-swipe access will be handled at the discretion of the college.
- Strike 3:
 - The **student will be placed on suspension for the remainder of the academic year**. At the end of that period the student may regain access of REPF facilities by completing all the necessary quizzes and trainings during the next academic year.

Team Disciplinary Policy

- Strike 1:
 - The team leadership and advisor will be notified by the Engineering Practice Coordinator that they have violated the operating agreement. **Officers and the advisor will be given a verbal warning** and thorough explanation of why this is a team issue, why they are being warned, and what the

consequences of further violations will be. This meeting may include the Engineering Practice Coordinator, an Engineering Dean, and the team advisor.

- Strike 2:
 - The entire **team will lose card-swipe access to the building**. Another meeting will be held that may include the Engineering Practice Coordinator, an Engineering Dean, and the team advisor. Card-swipe access may be reinstated at the discretion of the college.
- Strike 3:
 - The entire **team will be placed on suspension and will lose access to all REPF facilities**, including the bay, machine shop, and bench lab. The length of the suspension will be determined at the discretion of the college.

Certain infractions may be worth multiple strikes at the discretion of GCoE staff, faculty, and dean. Certain infractions may also be reported to the Office of Student Conduct, Institutional Equity Office, Title IX, OU Student Affairs, OUPD, and/or Engineering Student Life.

All Student Conduct, Title IX, and OUPD reports will be handled by the appropriate OU department.

Important Contact Phone Numbers

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|-----------------------------------|--------------------------------------|----------------------|
| • Police: | | 911 |
| • Fire Department: | | 911 |
| • Medical Emergency: | | 911 |
| • Oklahoma Poison Control Center: | | 1-800-222-1222 |
| • Jeff Biggerstaff | Engineering Student Life Coordinator | Office: 405-325-4724 |
| • Jimmy Cannon | Engineering Practice Coordinator | Office: 405-325-6844 |

Revisions

| rev. level | Date | Changes | Revised By |
|------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Original | January 26 th , 2010 | No Change | M. Black |
| A | January 12 th , 2011 | Removed ID Card requirement (p10), Added team training procedure(p18), Added project approval process(p19), Added fire evacuation map(p9), Updated contact phone numbers(p21) | M. Black |
| B | August 16 th , 2011 | Removed itemized list of campus policies. Added reference to Student Code and Campus Shop Safety Policy. | M. Black |
| C | January 12 th , 2012 | Added "exhaust fans must be turned on prior to spraying" to Paint Room procedures page 16 | M. Black |
| D | March 8, 2012 | Added Vehicle/Project Testing section (p 16) | M. Black |
| E | February 1, 2013 | Changed name on pg. 20 and contact info from M. Black to J. Cannon | J. Cannon |
| F | June 18, 2013 | Changed page 21: Safety Certification and Operating agreement. Contact info added and trainer signature. | J. Cannon |
| G | July 25, 2013 | Added page 22,23: Removal of Vehicle/Project form from the REPF | J. Cannon |
| H | July 25, 2013 | Changed Vehicle/Project Test to Project Testing and information reworded | J. Cannon |
| I | July 25, 2013 | Changed team trainer safety officer Responsibilities on page 15 | J. Cannon |
| J | August 9, 2013 | Added severe weather information on page 6. | J. Cannon |
| K | July 22, 2014 | Added page 12 PPE protection when dealing With hazardous materials | J. Cannon |
| L | August 4, 2014 | Added reference about projects pg. 20 | J. Cannon |
| M | March 27, 2014 | Added information about being enrolled at the University of Oklahoma to be a member/leader of a team must be in good academic standing page 9 | J. Cannon |
| N | August 20,2015 | Hazardous material information page 4 | J. Cannon |
| O | August 20,2015 | MSDS pg. 4 | J. Cannon |
| P | August 20,2015 | CNC Mill, Plasma Pg. 8 | J. Cannon |
| Q | August 20,2015 | CNC Router Info Pg. 10 | J. Cannon |
| R | August 22, 2016 | Personal Property pg. 3 | J.Cannon |
| S | September 5, 2017 | Card swipe on Machine Shop Door pg. 8 | J. Cannon |
| T | August 21, 2018 | Remove paint booth info. Painting will be done outside | J Cannon |
| U | August 22, 2018 | Incorporated University general student guidelines for shop safety pg.6-7 | J. Cannon |
| V | July 17, 2019 | Revised language regarding spill procedures pg. 8 Updated Dyno Room Procedures pg 12-13 | J. Biggerstaff |
| W | August 3, 2020 | Added Covid-19 Procedures Revised Disciplinary Procedures Overhaul of language and organization of manual | J. Biggerstaff |

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|---|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| X | August 17, 2021 | Revised Covid-19 Procedures Revised hours of operation and access Added language about unauthorized operation of projects or motors and to be respectful of other REPF events | J. Biggerstaff |
| Y | August 1, 2022 | Revised "How to get Access" section Revised machine shop training section Added Title IX section Updated REPF building hours Updated language, grammar, and spelling throughout | J. Biggerstaff |
| Z | July 10, 2023 | Complete reorganization and removal of duplicate material Added REPF Access and REPF Training Policy section Added Storage Locker and REPF B-18 sections Added Old Project Disposal, Storage, and Sale section Added Disciplinary Policy section Removed Safety Officer and New Project sections | J. Biggerstaff J. Cannon |