8 GAME RULES: HUMANS

8.1 Before the MATCH

H1. You can’t bring/use anything you want. The only equipment that may be brought to the ARENA and used by DRIVE TEAMS during a MATCH is listed below. Regardless if equipment fits criteria below, it may not be employed in a way that breaks any other rules, introduces a safety hazard, blocks visibility for FIELD STAFF or audience members, or jams or interferes with the remote sensing capabilities of another team or the FIELD.

A. the OPERATOR CONSOLE,
B. non-powered signaling devices,
C. reasonable decorative items,
D. special clothing and/or equipment required due to a disability,
E. devices used solely for planning or tracking strategy,
F. devices used solely to record gameplay,
G. non-powered Personal Protective Equipment (examples include, but aren’t limited to, gloves, eye protection, and hearing protection)

Items brought to the ARENA under allowances B-G must meet all of the following conditions:

i. do not connect or attach to the OPERATOR CONSOLE, FIELD, or ARENA
ii. do not connect or attach to another ALLIANCE member (other than items in category G)
iii. do not communicate with anything or anyone outside of the ARENA
iv. do not communicate with the TECHNICIAN
v. do not include any form of enabled wireless electronic communication
vi. do not in any way affect the outcome of a MATCH, other than by allowing the DRIVE TEAM to
   a. plan or track strategy for the purposes of communication of that strategy to other ALLIANCE members or
   b. use items allowed per part B to communicate with the ROBOT.

Violation: MATCH will not start until situation remedied. If discovered or used inappropriately during a MATCH, YELLOW CARD.

Examples of equipment that may be considered a safety hazard in the confined space of the ALLIANCE STATION include, but are not limited to, a step stool or a large signaling device.

Examples of remote sensing capabilities include, but are not limited to, vision systems, acoustic range finders, sonars, and infrared proximity sensors.

Use of imagery that, to a reasonably astute observer, mimics the Vision Targets employed on the FIELD is a violation of H1.

Examples of wireless communication include, but are not limited to, radios, walkie-talkies, cell phones, Bluetooth communications, and Wi-Fi.)

H2. Know your DRIVE TEAM positions. Prior to the start of the MATCH, DRIVE TEAMS and any control devices worn or held by HUMAN PLAYERS and/or DRIVERS must be positioned as follows:

A. HUMAN PLAYERS, DRIVERS, and COACHES in their ALLIANCE STATION,
**B.** TECHNICIANS in the designated area outside the ALLIANCE STATION

**C.** not in contact with the OPERATOR CONSOLE

Violation: MATCH won’t start until situation is corrected.

For the purposes of FIRST Robotics Competition, any device connected to the OPERATOR CONSOLE is considered a control device because REFEREES are not expected to differentiate between devices that can or cannot control the ROBOT.

**H3. Leave the POWER CELLS alone.** Prior to the start of the MATCH, DRIVE TEAMS may not rearrange the POWER CELLS within the ALLIANCE STATION or staged on the FIELD (that are not staged inside a ROBOT).

Violation: MATCH will not start until the situation is corrected.

### 8.1.1 During the MATCH

**H4. COACHES and other teams: hands off the controls.** A ROBOT shall be operated only by the DRIVERS and/or HUMAN PLAYERS of that team.

Violation: DISABLED.

Exceptions may be made before a MATCH for major conflicts, e.g. religious holidays, major testing, transportations issues, etc.

**H5. No wandering.** During the MATCH, DRIVERS, COACHES, and HUMAN PLAYERS may not contact anything outside the ALLIANCE STATION and TECHNICIANS may not contact anything outside their designated area. Exceptions are granted in cases concerning safety and for actions that are inadvertent, momentary, and inconsequential.

Violation: FOUL per instance.

**H6. POWER CELLS through LOADING BAYS only.** POWER CELLS may only be introduced to the FIELD

- **A.** during TELEOP,
- **B.** by a DRIVER or HUMAN PLAYER, and
- **C.** through the LOADING BAY.

Violation: FOUL per POWER CELL.

**H7. COACHES, no POWER CELLS.** During a MATCH, COACHES may not touch POWER CELLS, unless for safety purposes.

Violation: FOUL per POWER CELL.

**H8. Don’t trick the sensors,** Teams may not interfere with any automated scoring hardware.

Violation: RED CARD for the ALLIANCE.

**H9. POWER CELLS, recycle.** During TELEOP, an ALLIANCE may not have more than fifteen (15) POWER CELLS in their ALLIANCE STATION.

Violation: FOUL per POWER CELL.

If the POWER CELL count exceeds fifteen (15), excess POWER CELLS must be introduced into the FIELD immediately.
As soon as a sixteenth POWER CELL arrives in the ALLIANCE STATION, the ALLIANCE should be making a concerted good will effort to enter any extra POWER CELLS back on to the FIELD as quickly and as safely as possible.

There is no intent to issue penalties for delays due to DRIVERS or HUMAN PLAYERS having to move around their ALLIANCE partners while attempting to clear surplus POWER CELLS or because TELEOP began with more than fifteen (15) POWER CELLS in the ALLIANCE STATION due to scoring by opponents during AUTO. However, if a team is perceived as lagging in the judgement of a REFEREE, they will be issued a penalty.

It is the HUMAN PLAYERS’ responsibility to be aware of their surroundings.

**H10. POWER CELLS go on the rack.** POWER CELLS must be stored on the LOADING BAY racks. An ALLIANCE making a concerted, good-will effort to transport POWER CELLS from the CORRAL to a rack or Chute is not in violation of this rule.

**VIOLATION: FOUL. If repeated, TECH FOUL.**

The LOADING BAY rack holds fourteen (14) POWER CELLS and enables teams and REFEREES to count POWER CELLS in an ALLIANCE STATION. An ALLIANCE holding the fifteenth POWER CELL is not in violation of H10.

H10 means that POWER CELLS may neither be stored in the CORRAL during the MATCH nor are they required to contact the LOADING BAY rack before entering the FIELD.

As G4 prohibits using the rack during AUTO, an ALLIANCE that removes POWER CELLS from the CORRAL during AUTO and waits to place them on the rack until the start of TELEOP is making a “concerted good-will effort.”

Teams are encouraged to make it clear to REFEREES that H10 is not violated.

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**8.2 In the ARENA**

**H11. By invitation only.** Only DRIVE TEAMS for the current MATCH are allowed in their respective ALLIANCE STATIONS.

*Violation: MATCH will not start until the situation is corrected.*

**H12. Identify yourself.** DRIVE TEAMS must wear proper identification while in the ARENA. Proper identification consists of:

- **A.** All DRIVE TEAM members wearing their designated buttons above the waist in a clear visible location at all times while in the ARENA.
- **B.** The COACH wearing the “COACH” button
- **C.** The DRIVERS and HUMAN PLAYERS each wearing a “DRIVE TEAM” button
- **D.** The TECHNICIAN wearing the “TECHNICIAN” button
- **E.** During a Playoff MATCH, the ALLIANCE CAPTAIN clearly displaying the designated ALLIANCE CAPTAIN identifier (e.g. hat or armband).

*Violation: MATCH will not start until the situation is corrected. Those not displaying identification must leave the ARENA.*

**H13. Don’t abuse ARENA access.** Team members (except DRIVERS, HUMAN PLAYERS, and COACHES) who are granted access to restricted areas in and around the ARENA (e.g. via
TECHNICIAN button, event issued Media badges, etc.) may not coach or use signaling devices during the MATCH. Exceptions will be granted for inconsequential infractions and in cases concerning safety.

Violation: YELLOW CARD.

The TECHNICIAN’S role is to help the team prepare the ROBOT so it can perform at its full potential during a MATCH. The TECHNICIAN is not an additional COACH, DRIVER, or HUMAN PLAYER.

Team members in open-access spectator seating areas are not considered to be in a restricted area and are not prevented from coaching or using signaling devices. See E2 for related details.

H14.  Don’t mess with POWER CELLS. Teams may not modify POWER CELLS in any way. Temporary deformation to pre-load a ROBOT is an exception to this rule.

Violation: RED CARD.

Marking, cutting or standing on POWER CELLS are examples of violations.

H15.  Don’t bang on the glass. Team members may never strike or hit the PLAYER STATION plastic windows.

Violation: Verbal warning. If subsequent violations in more than one MATCH, YELLOW CARD.

H16.  Be careful what you interact with. DRIVE TEAMS are prohibited from the following actions with regards to interaction with ARENA elements.

A.  Climbing
B.  Hanging
C.  Deforming
D.  Damaging

Violation: MATCH will not start until situation is corrected. If during a MATCH, TECH FOUL.