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| Mechanism Controller:  “Auto”\* Commands | \*default state of controller; without pressing left stick button or both triggers. Includes some extra commands | \*\*control of drive train is seized by the computer, automatically aligning and placing |
| Name of command | Button/input used | Description |
| Hatch pickup\*\* | Right bumper | Grabs hatch from hatch station |
| Cargo Pickup | Left Bumper | Grabs cargo from the ground |
| Elevator Home | Back | Returns the elevator to the bottom/home position. Must be used after every place/pickup command. |
| Eject Cargo | Right Stick button | Simple dumps cargo. Immediately. |
| Place Hatch lvl 1\*\* | A | Places a hatch on level one of the rocket (or on the cargo ship) |
| Place Hatch lvl 2\*\* | B | Places a hatch on level two of the rocket |
| Place cargo in cargo ship\*\* | Start | Places a cargo on the cargo ship |
| Place cargo lvl 1\*\* | X | Places cargo on level 1 of the rocket |
| Place cargo lvl 2\*\* | Y | Places cargo on level 2 of the rocket |

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| Mechanism Controller:  “Normal” † Commands | †accessed by holding the left stick button down | §does not allow robot to seize control of the drive train for auto-alignment |
| Name of command | Button/input used | Description |
| Hatch pickup § | Right bumper | Grabs hatch from the loading station |
| Place hatch lvl 1§ | A | Places hatch on level 1 of the rocket (or cargo ship) |
| Place hatch lvl 2§ | B | Places hatch on level 2 of the rocket |
| Place cargo in cargo ship§ | Start | Places cargo in the cargo ship |
| Place cargo lvl 1§ | X | Places cargo on level 1 of the rocket |
| Place cargo lvl 2§ | Y | Places cargo on level 2 of the rocket |

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| Mechanism Controller:  “Manual” ‡ Commands | ‡does not use automatic drive train alignment. Used by holding down both triggers simultaneously. |  |
| Name of command | Button/input used | Description |
| Ball arm toggle (might be removed) | B | Toggles ball arm from down to up, and vice versa |
| Ball arm wheels on/off (might be removed) | X | Turns the ball arm wheels on and/or off |
| Ball arm eject cargo (might be removed) | Y | Turns ball arm wheels on in order to eject the cargo |
| Hatch claw | Back | Toggles hatch claw as open/closed |
| Ball eject | Start | Pushes cargo out of elevator |
| Hatch arm toggle | A | Moves the hatch arm up/down |
| Elevator drive | Left stick Y (up and down) | Moves the elevator up and down |

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| Drive Controller |  |  |
| Name of command | Button/input used | Description |
| Climb lvl 2 | Back && X | Climbs onto second level of platforms/level2 |
| Climb lvl 3 | Back && Y | Climbs onto top level of platforms/level 3 |
| Abort climb | B | Stop climbing |
| Driving around | Left Stick | Turns the swerve wheels in the direction of the stick and at a power according to the distance from middle |
| Turning | Right Stick X axis (Left and Right) | Spins the robot |