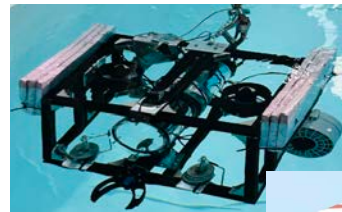




Where's Waldo XVII

Company Spec Sheet

We are Trafalgar Castle School, Waldos, from Whitby, Ontario, Canada. Our team travelled 3,036 km, about 3 hours, to participate in our fourth MATE competition. Consisting of 13 grade 9-12 students, we have consistently competed for the past three years. Our team meets every Thursday from 3:30 to 5:30, and since March, we meet three times a week (121 hours total). Our ROV, Waldo XVII, costs \$3,073.15, measures 22.5 inches by 26 inches by 11.5 inches, and weighs 20 pounds. Our robot incorporates several safety components to ensure safe usage. The 3D printed motor protectors prevent any hazard. The robot's body is designed with smooth, rounded edges for safety and efficiency. We always have at least a supervisor to ensure our safety while building the robot, and we always have a supervisor and a lifeguard for our testing in the pool. A terminal block with compact splicing wire connectors powers all ESC's, and jumper wires keep the connections organized between the ESCs and Arduino. The Ethernet cables are detachable from the battery, and a chain prevents tension on the connectors when the ROV is in water. The tether has a tension chain that prevents pulling on the penetrators, avoiding leaks. The waterproof capsule is secured with a hub coupling to wiring adjustments. The cylindrical capsule is sealed with silicone-lubricated ends and locked with a plastic cord to maintain a watertight seal. Our robot also has some cool special features, including a fully waterproof claw and three cameras on the robot.



Row 1:	Lisa Wang	Gr11	Head of Electrical	Row 2:	Lucy Wu	Gr11	Electrical
	Neha Kirthiraj	Gr12	Mechanical		Anna Xiaomu	Gr11	Electrical
	Mrs. Senior		Mentor		Daisy Hu	Gr10	Electrical
	Mr. Lyew		Mentor		Nini Cao	Gr11	Head of Business
					Charlotte Schussmann	Gr11	Co-Head Mechanical
					Natalie Calnek	Gr11	Head of Engineering
					Taara Gill	Gr12	CEO
					Sophia Di Vizio	Gr12	Co-Head Mechanical
					Lorelei Von Bargaen	Gr9	Mechanical
					Leila Salem	Gr9	Head 3D Printing
					Abeeghaa Nishangan	Gr9	Pilot

Where's Waldo XVII

