Water Bottle Cooling Station

(Technical Report)

"Amateur Athletics": Exploring the Rights of Student-Athletes in America

(STS Research Paper)

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by

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Preface

What justifies a transition to a new system? Changing longstanding systems can be a risky departure from the tested and familiar, but such change is sometimes necessary.

How does one remotely cool water in a bottle without ice? Though ice can quickly cool liquids, it is not always available. The research team sought to fabricate a remote water bottle cooling station, to let users chill a beverage anywhere, which may limit water waste. We used a fan, a heatsink, and a thermoelectric cooler underneath an aluminum plate as our cooling station. An MSP430G chip was coded to adjust the temperature of the cooler. A remote prototype was not developed; the cooling system was bulky and the energy supply required a large charging cable, making the device stationary. To develop a portable cooling station, future researchers will need a small, powerful battery in a system that can safely displace heat from bottles.

What are the implications of California's Fair Pay to Play law for the NCAA and student athletes? The law overturns the NCAA's amateurism standard, which still dominates amateur sports, primarily football and basketball, in other U.S. states. The law will force the NCAA to change its policies due to national attention to its human rights violations and to the money it may lose. In this battle, advocates for the student-athletes' right to profit from their name, image, and likeness oppose fair play advocates who claim to seek to preserve the competitive integrity of amateur sports.

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