

Shell ECO-MARATHON® AMERICAS

TEAM FACT SHEET



North Carolina A&T State University

Country: United States
Design Class: Prototype
Fuel Type: Hydrogen
Team Name: Aggie
Vehicle Name: Aggie

Team Members:

Messiha Saad - Faculty Advisor
Sean Slate - Team Leader/Team Manager - Driver
Matthew Fuini - Team Member
Damion Rose - Team Member
Alexander Kutterer - Team Member
Brandon Patton - Team Member/Driver
Windell Cox - Team Member/Driver



Award Submission(s):

Safety

In every design consideration, safety has always been our number one concern. The structural integrity of the frame, the design of robust mechanical systems that are well integrated, the fire-retardant suit and ease of access to the fire extinguisher are examples of our safety-first design philosophy.

- The design will provide for a 360 deg. Field of vision
- The car is designed with a roll bar, capable of protecting the driver in the unlikely event of a vehicle roll-over.
- A fire wall separating engine compartment from driver will be constructed of zetex aluminum foil fabric, a material capable of withstanding two hours of exposure to flames.
- The cockpit is well ventilated with relative air flow.
- The vehicle will be equipped with an H2 sensor, which also acts as an emergency shut-off system. The H2 sensor equipped with a beeper, and with a relay that is normally-closed, latching (pushbutton reset).
- The fuel cell is also equipped with its own H2 sensor shutting off the hydrogen supply to the fuel cell in case of leakage.
- The vehicle will have an internal and an external toggle switch capable of cutting the current flow to the motor.

Design

Our team has strived to create a most aesthetically pleasing prototype. It is the team's opinion that a sleek, low profile design with aerodynamic features will not only aid in the vehicle's performance, but also in creating the image of a serious contender in this competition.

