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**A Preliminary Assessment of Inducing Anthropogenic Tropical Cyclones  
Using Compressible Free Jets and the Potential for Hurricane Mitigation**

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**Abstract**

We have conceptually studied the potential for mitigation of natural hurricanes by inducing anthropogenic tropical cyclones prior to or in front of an advancing hurricane. We now propose actual hardware for the task. It consists of multiple jet engines mounted on barges or ships that will be dispatched to strategic locations in the ocean where the sea surface temperature is high and the vertical temperature profile and atmospheric conditions are such that the potential for development of a hurricane or tropical storm is high. The engines will direct compressible high momentum, high-speed free jets skyward causing entrainment of even larger amounts of additional air to form plumes and updrafts. The unstable humid updraft will itself produce conditions for additional entrainment and evolution of tropical cyclones. These anthropogenic cyclones will extract enthalpy from the ocean, cooling the ocean surface and depriving the advancing natural hurricane of its needed thermal energy.

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