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Macho mengi: Many eyes on the Universe

Michael McCullar
Seal of Valor, USA

Macho Mengi (means “Many Eyes” in Swahili) will be an interferometric observatory system that uses the combined assets of free-flying nanosatellite formations and earth-based observatories to image stars, exoplanets and also track near earth asteroids. We envision Macho Mengi extending beyond Earth around our solar system and with ground-units stationed on other planets and moons. It is being developed by the NSBE Houston Space Chapter in partnership with Texas A&M University, Charles Stark Draper Laboratory, Seal of Valor (501c3), and C3, Inc. We are currently in phase 2 of development which is to construct an interferometric telescope test bed built for the purpose of educating young engineers and promoting STEM career fields for students. The test bed will facilitate ongoing research and development to develop the systems in the nanosatellite telescopes (NSBESAT-2) in addition to extending the network of earth-based observatories (serving schools and college campuses).

Biography

Michael McCullar is the principal visionary and program lead over the Macho Mengi (M2) Observatory System Program. He is also president and founder of Seal of Valor, a non-profit organization specializing in educational through space research & development. Michael earned a BS in Mechanical Engineering from Illinois Institute of Technology and began working as a Mathematical Analyst for LogiK Research & Engineering in Cincinnati, Ohio. He later served as a Civil Engineering Officer in the U.S. Air Force. Afterwards, he worked for Jacob's Technology as a Test Director at NASA Johnson Space Center, Crew and Thermal Systems Division. Michael recently joined GeoControl Systems, Inc. as their Facility Support Services Manager.