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SPACESHIPS IN SETI RESEARCH AND POTENTIAL FOR SPACEFLIGHT TECHNOLOGY

Abstract

The concept of the possibility of other life existing in the universe has been around for more than a century. Though it has started with science fiction as a possibility, it has progr3essed to become a branch of science with work such as the Drake Equation which estimates the possibility of life existing in the galaxy. Moreover, the concepts like the Dyson Sphere has allowed many scientists to even classify the advancement of potential extraterrestrial civilizations. Hence, due to these dynamics, SETI Research has been going on for many decades and it has been of interest to NASA as well as to other space agencies and research organizations across the world. Naturally, mankind is curious about the possibility of life in the universe and multitude of tools are used for this purpose. Besides radio astronomy methods, it is essential to understand the potential for possible ETI spaceships that may be used. Unfortunately, the society has a very superficial understanding of the possibility of the existence of ETI and almost every unknown object is unfortunately labelled as UFO, which possibly dilutes the importance of SETI research in the eyes of the public. It is perhaps better to take a more didactic and clinical approach to SETI by understanding technological implications. One interesting way this can be achieved is by understanding the public's perception of spaceships in SETI research and to eliminate the myth of UFOs so that the topic can be discussed more scientifically. This paper focuses on both the he space dynamics, space propulsion and aerodynamics of potential ETI spaceships to dispel the wrong notions of UFOs and to create a meaningful platform to understand what ETI spacecraft could and should look like in line with the astronautical engineering and physics principles of the universe. It will also serve a dual purpose of creating an ideal spacecraft to cross the interstellar void and then the ideal ETI spacecraft concept can be reverse engineered to create an interstellar capable spacecraft within this century. Thus, while this paper focuses on the perception of the society, it also delves into technical realm to present the society with possibilities for the future of SETI as well as for the future of advanced spaceflight. The concept of flying saucers is disproven while showing what a potential ETI ship will need to look like and how it will need to function.