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New Design Approach for Very Light Jet Aircraft

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Abstract

This paper discusses a new design approach for very light jet aircraft (VLJ). The design process that covers by this paper is just from conceptual approach. Current technical information of the light jet aircraft in the market will be studied for competitor analysis purposes. After that, the calculation process will take part, like initial sizing, wing design and aircraft performance. To improve the operational flexibility and the aircraft performance, three surface configuration and laminar flow technology will be applied to the above VLJ. Description is then given of the aerodynamic design of a wing which incorporated both three surface configuration and laminar flow technologies. It concludes with a discussion of the results and recommendations for future work.

Biography

Prasetyo Edi has completed his Ph.D. at the age of 38 years from Cranfield University. He was working at Indonesia Aerospace (IAe) for 19 years. After he retired from IAe, he teaches at several universities (Universiti Putra Malaysia, Emirates Aviation College, Universiti Malaysia). Currently he works as a faculty at Aerospace Engineering Department, College of Engineering Sciences, King Fahd University of Petroleum & Minerals, 50603 Dhahran, Kingdom of Saudi Arabia. He has published papers in reputed journals.