

Challenges of Future Aircraft Propulsion Aircraft Electric Green Taxiing Intelligent System Rear View Camera, alarms and sensor

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Abstract

This paper is an outstanding idea that is going to change the traditional way of pushing back an airplane off the gate. However, this operation has many disadvantages such as, the operation cost/ flights, increasing fuel consumption, increasing the engine flight hours, damaging the aircraft by the tug, and more. Electric Green Taxiing System (EGTS) is going to add many advantages to the airline companies who seek every small idea to reduce the operational cost, and some of these advantages of this study are; reduced fuel consumption, reduced gas emission fees, reduced Foreign Object Damage (FOD), reduced ground operation time, reduced aircraft repositioning fees, and Safety development by reducing the engine ingestion/ jet blast. In addition to that, the rear view camera, alarms and sensor are going to assist the rear interpretation for the pilot and to improve the ramp safety since the ramp full of ground support vehicles. The method is going to benefit the aviation industry by reducing to ground time too.

Keywords

Electric aircraft, Airport, Future aircraft concepts, Aircraft design,

Biography

Ahmad Ali Yame earned his BSc in Engineering Technology 2010, and two MSc in Industrial Engineering 2015, and Engineering Management 2011 from the Lawrence Technological University and his first MSc in Mechanical Engineering 2007 from the National University of Malaysia. He earned his Associate's degree, Mechanical Engineering 2004 from the Libyan Higher Professional Center for Comprehensive Professions. He primarily develops engineer, but also has experience with software, and testing. Mr. Yame has tested many enterprise applications for automotive MAHLE Laboratories in 2013, he worked with Wipro and Panasonic automotive in North America 2016 to test a vehicles application and AHU for diagnostic functionalities of engine control systems. He has organized several simulations, in order to test the engine control software and the diagnostic functionality on a CAN logs, respectively, through non-regression and diagnostic tests. He is member of SME and IEEE.

Hasan Asaibi is currently a fulltime student in College of Engineering at University of Detroit/Mercy. Mr. Asaibi holds a Bachelor of Science degree in Civil Aviation & Meteorology College from Libya University his graduate project was Electrical System of Airbus 300-600. He had his first certificate in Aircraft Maintenance Engineer License **(B2)** which is approved by local Authority of Civil Aviation. (Basic electrical, Radio & Radar, Basic Compass, and Autopilot) then honor Airbus A320 Type Rating Certificate. He worked at Al-Barq Company for Computers and Network and Manager Assistance in Dahra Training Center. He has taught courses in dPAVES In Flight Entertainment System maintenance training Courses with Rockwell Collins and Aircraft Maintenance skills. Mr. Asaibi served as an airplane engineer in technical Department, at Maintenance Control Center of the Libyan Airlines for 6 years.