DESIGN A MODEL AND MATHEMATICAL APPROACH FOR VECTORED TRUST CONTROLLED TRI ROTOR AERIAL PLATFORM

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ABSTRACT

It is a challenging factor to address the more or less of vectored trust-controlled platforms for Stability. There are unnecessary parts in any UAV plat form and must be identified and apply removal of such parts or substitute with aerodynamically more suitable parts will lead to design of good aero stable platform. Testing platform for the different attitude for disturbances and effective analyzing can lead to develop best tri-rotor vectored trust-controlled platform. Since project is to develop superior tri-rotor system to perform better stability and effective control of motion various mathematical and control approaches to be introduced. A Discussion and an analytical approach towards developing tri-rotor system is a need of future multi-rotor platforms. In coming years there will be a great advancement on tri-rotor systems. Still there are many areas to study when developing a stable tri-rotor platform with precise six directional control. Design will demonstrate stability of the vectored trust-controlled tri-rotor over other multi rotor platforms and enhance the present capabilities of tri-rotor platform to prove it as the future of the multi rotor UAV platforms. To demonstrate the mathematical approach discussed here, it is used a platform enable to carry out further studies on to tri copters.

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Ex. Squadron Leader. Hashitha Maduranga Madanayaka
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