Test protocol

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Status

Examined		
Approved		

TSRT71 Automatic control project   ©Lips
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Project identity

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Document history

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0.1	060507	First draw	AL	AJ, MJ
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1   Introduction

The *General Aviation* (GA) aircraft fleet has become very old (40+ year old aircrafts are now very common) thanks to reliable air frames and rapidly increasing prices of new light aircraft. A vast majority of these aircrafts are equipped with old-fashioned mechanical flight instruments, now reaching the end of their lifetime as the air frames become older. Instead of performing a complete upgrade of the entire instrument panel, which can result in costs often exceeding the value of the entire aircraft, one can complete the system with a much more affordable Micro EFIS. A Micro EFIS is, as the name implies, a small EFIS (*Electronic Flight Information System*), targeted for the GA market. It is intended as a backup system for the mechanical flight instruments.

2   Function of the test protocol

The purpose of this document is to summarize the results of the tests that should have been done according to the test plan. These tests are performed to insure that all requirements in the requirement- and designspecification are met.

2.1   Structure of the test protocol

The project is divided into the following subsystems; OLED unit, HSI/ADI/ESI display modes, setup mode, and a rotary switch unit. This test protocol is divided into tests which are divided after the different subsystems. There have also been tests performed on the entire system.

2.2   Presentation of the tests in this document

The tests that should have been performed are presented in the following way.

Refer to test number:_____

Description of test:_____
_____
_____

Short description of how the test was performed:_____
_____
_____

Responsible for the test:_____

Test result:

First occation   [ ] Approved   [ ] Failed
                         Comment:_____
                         Date:_____

Second occation   [ ] Approved   [ ] Failed
                         Comment:_____
                         Date:_____

Third occation   [ ] Approved   [ ] Failed
                         Comment:_____
                         Date:_____

Remaining comments:_____
_____
_____
_____

2.3   Failured tests

If a test failures the responsible for this test shall, on their own or together with concerned members in the group, decide if the test is incorrect or if the requirements in the requirement- and designspecification not are attainable.

If a test has failed because one or several requirements in the requirement- and designspecification not are attainable a negotiation with customer and supervisor shall take place.

2.4   Delimitation

This document does not present what makes a test successful, that is up to the responsible for the test to decide on the basis of the requirements in requirement- and designspecification.

3   Performance

Most of the tests was simulated in DXP 2004. By controlling the signals coming in to the systems, internal and external signals have easily been checked. This have made it easy to correct any mistakes. HSI and ADI display modes have also been tested on a simulation board..

4   Time consumption

Since many tests have been done during the implementation of the different systems, very little time have been reported as testing.

References

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[2] George Grätzer, *Math into LaTeX*, Birkhäuser, 1996.

[3] Jan-Erik Strömberg, *Requirement specification – Micro EFIS*, DST Control, MEFIS/Doc/Spec/R0543S01.fm, version 1.0.0.