

## Grant Robinson

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**From:** McConnell, DAVE P <dave.p.mcconnell@lmco.com>  
**Sent:** Wednesday, March 08, 2017 9:39 PM  
**To:** Grant Robinson  
**Cc:** Nakhon Avionics; Nakhon Supervisor Engineer; Daryl Dixon  
**Subject:** Approval to operate mixed -012 / -112 DCU's

**Importance:** High

Grant;

Per the following FTR response below Sikorsky Engineering has granted approval to operate mixed -012 / -112 DCU's on HVB.

Customer: Thai Aviation Services Limited  
Case Number: C0055018  
Case Title: Request To Operate Mixed -012 / -112 DCUs  
Aircraft Serial Number: 920279  
Aircraft Model: S-92A  
ATA: 31  
Primary Part: 822-1846-312 DCU 8.0

### Problem Description:

#### Background:

TAS removed a P/N 822-1846-112 DCU on A/C S/N 920279 for causing intermittent MFD black screen and red X. Case C0054777 refers.

SCI shipped two -312 DCU's (S/N 174VX0 and 20) in lieu of a replacement -112 DCU.

S/N 174VX0 was installed as DCU 1. S/N 20 was installed as DCU 2.

Reference 8130's and Rockwell Collins shop report for S/N 174VX0 and S/N 20.

Paperwork indicated that both -312 DCU's had been inducted for suspected corrupt software, including loss of MGB oil pressure and hydraulic pressure display. Rockwell Collins found no fault and released both units with no further action.

S/N 174VX0 displayed corrupted data and DCU miscompare as soon as it was installed in 920279 on 06 MAR. This office performed a reload of the AMS 8.0 software and all data was restored. Case C0054781 refers.

On the second flight of the day on 07 MAR the crew reported MFD's 1 and 2 momentarily blacked out and then spontaneously restored. No further problems were noted during that flight or subsequent flights that day.

Maintainers preflighting the A/C on 08 MAR noted dashes for the MGB pressure, and hydraulic pressure data missing for all three systems. Reference to the Avionics Status page showed both DCUs OFF. The History page showed DCU1 Miscompare Fault 001 and DCU Comm Faults 002 and 006.

The missing data could not be restored by reversion.

TAS believes that one or both of the -312 DCUs are exhibiting the same discrepancies which the repair facility was unable to replicate.

#### Ongoing:

SCI has no more DCUs of any dash number to provide TAS and has not determined a delivery date.

TAS has one serviceable spare -012 in stores and one serviceable -112 that was removed from 920279 when the two -312's were installed.

The -012 and -112 have been fitted together into 920279. All cockpit indications are normal, software P/Ns match, AMS 8. 0 is displayed and there are no miscompares.

TAS request on an AOG basis:

- 1) SA approval to temporarily install TAS's serviceable -012 and -112 DCUs in 920279 until SCI is able to provide two serviceable spare DCU's of matching dash numbers.
- 2) SA approval to record the removal of ASB 92-31-007 from 920279, which had been complied with upon the installation of the -312 DCUs, until such time as serviceable replacement -312 DCUs can be refitted to the A/C. EoM

### **Problem Resolution:**

Based upon "The -012 and -112 (DCU'S) have been fitted together into 920279. All cockpit indications are normal, software P/Ns match, AMS 8. 0 is displayed and there are no miscompares", approval to temporarily install TAS's serviceable -012 and -112 DCUs in 920279 until SCI is able to provide two serviceable spare DCU's of matching dash numbers is granted.

Approval to record the removal of ASB 92-31-007 from 920279, which had been complied with upon the installation of the -312 DCUs, until such time as serviceable replacement -312 DCUs can be refitted to the A/C is granted.

Official Letter is in the process of being loaded in FSR Thailand DocPak.

### **David P. McConnell**

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