OCCURRENCE REPORT: 67778

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FSIS 67778 08 OCT 1982 AIR ACCIDENT

Status: supplemental sent

QQ 33 08/OCT/1982 18:07

Unclassified

1. Injury Level: Nil - No Injury
2. Aircraft/Operated By: CC130310
3. Aircraft Ownership: 429 SQN / 2587 / 8 WG /
4. A. Location: - COMOX -
Latitude: N49-43
Longitude: W124-54
4. B. Date/Time: 081400Z OCT 1982
4. C. Phase of Flight: TAKE-OFF - INITIAL CLIMB TO 500 FEET ON TAKE-OFF
5. Damage Level: Serious - Major component / 3rd line maint
7. Mission Type: TRANSPORT AND COMMUNICATIONS, TALEX (INCLUDES HELOS)
8. Description: ON TAKE-OFF FROM RWY 11 IN COMOX, JUST AFTER V1, DURING ROTATION ALL 4 ENGINE TORQUES DROPPED FROM 17000 IN/LBS TO 14000 IN/LBS.
13. Flight/Ground Conditions: INSTRUMENT FLIGHT IFR/IMC
14. Light/Weather Conditions: TWILIGHT (DAWN/DUSK), RAIN
15. Alighting Conditions: HARD SURFACED RUNWAY, WET
16. Aircrew Information: ; Time on Duty Last 48 Hrs: 15 hrs, Day of Occurrence: 2 hrs; Flying Hours Last 48 hrs: hrs; Past 30 Days: hrs; Total on Type: hrs; Grand total: hrs.
18. Aircraft Maint Data: TSN Aircraft: CC130/310, 0 hrs, TSI: 300 hrs, TSO: hrs, CF349: , CF543: , Civilian Journey Log: , Inspection: #1 OR 2 PERIODIC OR "B"
20. Component Information: ENGINE WUC: SER NUM: 102239 NSN: TSN: TSO: TSI: 0 TSII: , Part List:
22. A. Investigation: 5 SECONDS LATER THE AC ENCOUNTERED A FLOCK OF BIRDS AND A LOUD THUD WAS HEARD FROM THE LOWER LH SIDE OF THE FUSELAGE. SIMULTANEOUSLY THE TORQUE ON #4 ENGINE BEGAN TO GIVE ERRONEOUS FLUCTUATIONS 0 TO 20,000 IN/LBS. THE TORQUE GAUGE APPEARED TO BE U/S AS NO ASSYMMETRIC THRUST WAS EXPERIENCED. ALL OTHER ENGINE GAUGES WERE NORMAL. SHORTLY THEREAFTER THE T.I.T ON #4 ENGINE BEGAN TO GIVE FALSE INDICATIONS, 100 DEGREES C TO 1200 DEGREES C. AS WELL, THE #4 ENGINE GENERATOR OUT LIGHT AND THE #4 ENGINE WAS SHUT DOWN. DURING RECOVERY BACK TO COMOX THE #2 COMPASS SYSTEM FROZE AND AN UNUSUAL SMELL WAS NOTICED THROUGHOUT THE CARGO COMPARTMENT. THE CARGO COMPT AND FLIGHT DECK AIR CONDITIONING SYSTEMS WERE SELECTED OFF AND TO AUX VENT. A PRECISION RADAR WAS THEN CARRIED OUT IN IMC TO RWY 29 TO A FULL STOP. ON THE TAXI INTO THE RAMP IT WAS NOTICED THAT THE RH INBOARD AND RH OUTBOARD LEADING EDGE TEMP INDICATORS WERE FLUCTUATING IN AND OUT OF THE OVERHEAT RANGE. ALL 4 ENGINE BLEED AIRS WERE THEN SELECTED OFF. THE AIRCRAFT WAS PARKED AND SHUT DOWN, AT WHICH TIME SMOKE/STEAM WAS SEEN COMING FROM THE RH WING. A GROUND EVACUATION WAS CARRIED OUT AND FIRE FIGHTING EQUIPMENT CALLED IN. THE RH WING WAS THEN HOSED DOWN IN ORDER TO COOL THE SKIN. UPON FURTHER INVESTIGATION THE FOLLOWING CIRCUIT BREAKERS WERE FOUND POPPED: A. #4 ENGINE IGNITION CONTROL. B. #4 ENGINE FUEL CONTROL. C. #4 ENGINE FIRE DETECTION. D. WING AND EMPENNAGE OVERHEAT WARNING LITES. E. RH LANDING LIGHT. F. RH LANDING LIGHT MOTOR. G. NAVIGATION POSITION LIGHTS. TOTAL FLIGHT TIME FROM TAKE-OFF TO LANDING WAS 11 MINUTES.
23. Cause Factors: PERSONNEL OTHER FLT. CREW DISTRACTION THE CREW WERE DISTRACTED BY A BIRDSTRIKE IMMEDIATELY FOLLOWING THE TORQUE DROP, LEADING TO SUBSEQUENT CHANNELIZATION OF ATTENTION.
PERSONNEL OTHER FLT. CREW INATTENTION THE FLIGHT ENGINEER DID NOT RECOGNIZE THE TORQUE DROP ON TAKE-OFF NOR THE LOW STABILIZED TORQUE ON ALL FOUR ENGINES.
MATERIEL AIRFRAME UNDETECTED PROGRESSIVE BREAKDOWN THE BLEED AIR DUCT RUPTURED FOR UNDETERMINED REASONS.
24. Preventive Measures: (SEE DETAILED DESCRIPTION) AN AMENDMENT TO THE CC130 AOI C-12-130-000/MB-Z10 WAS MADE TO EXPAND THE INFORMATION ON MASSIVE BLEED AIR FAILURES. THE COMPUTER GENERATED VTR FROM FDR DATA WAS DISTRIBUTED TO CC130 UNITS FOR TRAINING PURPOSES WITH THE CONCURRENCE OF THE FLIGHT CREW. THE INSPECTION CYCLE FOR MAIN BLEED AIR DUCTS WILL BE INCREASED FROM EVERY SECOND PSI TO EVERY PSI. A REVIEW OF THE

LEADING EDGE OVERHEAT WARNING SYSTEM WILL BE UNDERTAKEN TO INCORPORATE ADDITIONAL SENSORS IN THE LEADING EDGE AREAS.