

OCCURRENCE REPORT: 68957

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FSIS 68957 12 JAN 1987 AIR ACCIDENT

Status: supplemental sent

Unclassified

1. Injury Level: Nil - No Injury
2. Aircraft/Operated By: CC130333 / 436 SQN / 2523 / 8 WG /
3. Aircraft Ownership: 435 SQN / 17 WING / 3435 /
4. A. Location: - LAPES EXTRACTION ZONE CFB EDMONTON -
4. B. Date/Time: 121630Z JAN 1987
4. C. Phase of Flight: LOAD/UNLOADING - AIRBORNE CARGO DROP, PARA DROP
5. Damage Level: Serious - Major component / 3rd line maint
7. Mission Type: SQUADRON (ALL)

8. Description: ON 12 JAN 87, THE CREW OF CC130333 WAS CONDUCTING STUDENT PILOT AND LOADMASTER LOW ALTITUDE PARACHUTE EXTRACTION SYSTEM (LAPES) TRAINING AT THE CFB EDMONTON EXTRACTION ZONE (EZ) DURING LAPES COURSE 8701.

13. Flight/Ground Conditions: CONTACT - VISUAL FLIGHT VFR/VMC (GROUND REFERENCES)

14. Light/Weather Conditions: BRIGHT DAY, GOOD VFR

15. Alighting Conditions: PREPARED (UNPAVED), SNOW COVERED/SNOW DRIFTS

16. Aircrew Information: CAPTAIN (NOT INSTRUCTING); Time on Duty Last 48 Hrs: 2 hrs, Day of Occurrence: 2 hrs; Flying Hours Last 48 hrs: 1 hrs; Past 30 Days: 52 hrs; Total on Type: 2212 hrs; Grand total: 2441 hrs.

CO-PILOT; Time on Duty Last 48 Hrs: 2 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: CC130/333, 0 hrs, TSI: 216 hrs, TSO: hrs, CF349: , CF543: , Civilian Journey Log: , Inspection: SUPPLEMENTARY

20. Component Information: ENGINE WUC: SER NUM: 109261 NSN: TSN: TSO: TSI: 611 ACCEPTANCE TSII: , Part List:

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ENGINE WUC: SER NUM: 109181 NSN: TSN: TSO: TSI: 611 ACCEPTANCE TSII: , Part List:

ENGINE WUC: SER NUM: 109235 NSN: TSN: TSO: TSI: 611 ACCEPTANCE TSII: , Part List:

22. A. Investigation: THE PURPOSE OF THE MISSION WAS PRIMARILY A "DROGUE-TOW" SORTIE FOR THE PILOT LEFT-SEAT CANDIDATE TO PRACTISE ADDITIONAL EZ RUN-INS AND LAPES EMERGENCY PROCEDURES. AS WELL, THE PILOT RIGHT-SEAT CANDIDATE WAS TO BE PROVIDED WITH HIS FIRST LEFT-SEAT FAMILIARIZATION. THREE UNEVENTFUL DROGUE-TOWS WERE ACCOMPLISHED BY THE LEFT-SEAT CANDIDATE, WHO WAS ALSO THE AIRCRAFT COMMANDER. THE PILOTS THEN CHANGED SEATS WHILE AIRBORNE TO PLACE THE RIGHT-SEAT CANDIDATE IN THE LEFT SEAT FOR HIS FAMILIZATION AND THE AIRCRAFT COMMANDER IN THE RIGHT SEAT. THE INSTRUCTOR PILOT WAS OBSERVING AND STANDING BEHIND THE LEFT SEAT. ON THE FIRST APPROACH FLOWN BY THE PILOT IN THE LEFT SEAT, THE AIRCRAFT CONTACTED THE GROUND DURING THE FLARE FROM A STEEPER THAN NORMAL APPROACH. CONTACT WAS MADE ON THE EZ CENTERLINE BETWEEN THE RELEASE AND IMPACT PANELS. THE AIRCRAFT RAMP AND DOOR WERE OPEN AT THE TIME OF IMPACT. ALTHOUGH THE OCCURRENCE WAS INITIALLY CLASSIFIED AS "D" CATEGORY, IT WAS SUBSEQUENTLY RE-CLASSIFIED AS "C" CATEGORY IN ACCORDANCE WITH A-GA-135-001/AA-001.

23. Cause Factors: PERSONNEL MANAGEMENT/UNIT INFORMATION/COMMUNICATION THE COURSE TRAINING PLAN REQUIRED TO GIVE GUIDANCE TO TALS LAPES INSTRUCTOR PILOTS WAS NOT DEVELOPED AS DIRECTED BY ATGHQ IN THE AIRCREW EVALUATION TEAM REPORT OF 8 NOV 84.

PERSONNEL SUPERVISION/UNIT COMPLACENCY SQUADRON SUPERVISOR FAILED TO IDENTIFY AND RECTIFY A RECURRING PRACTICE WHICH CONTRAVENED THE DIRECTION CONTAINED IN ORDERS AND DIRECTIVES, I.E. LAPES CTS.

PERSONNEL PILOT (32A) INFORMATION/COMMUNICATION THE INSTRUCTOR PILOT DID NOT CONDUCT A PRE-FLIGHT BRIEFING SUCH THAT THE TWO STUDENT PILOTS WERE FULLY COGNIZANT OF THE LAPES PROFILE REQUIRED.

PERSONNEL PILOT (32A) JUDGEMENT THE INSTRUCTOR PILOT, RECOGNIZING THE DESCENT TO BE OF A HIGHER ANGLE THAN NORMAL, ALLOWED THE STUDENT PILOTS TO CONTINUE THE MANOEUVRE.

PERSONNEL PILOT (32A) NON-COMPLIANCE WITH ORDERS THE INSTRUCTOR PILOT DID NOT OCCUPY THE RIGHT SEAT DURING THE FIRST LEFT-SEAT FAMILIZATION RUN OF THE STUDENT IN CONTRAVENTION OF THE COURSE TRAINING STANDARD (CTS) FOR CC130 HERCULES LAPES PILOT RIGHT-SEAT QUALIFIED, CHAPTER 5, PARAGRAPH 2.B.

PERSONNEL PILOT (32A) TRAINING THE INSTRUCTOR PILOT'S UNDERSTANDING OF THE LAPES DESCENT PROFILE WAS IN ERROR IN THAT HIS PERCEPTION OF THE CORRECT PROFILE WAS STEEPER THAN THAT RECOMMENDED IN CFACM 60-2601(1). PERSONNEL PILOT (32A) TRAINING DUE TO INSUFFICIENT TRAINING, THE AIRCRAFT COMMANDER WAS UNABLE TO PERFORM RIGHT-SEAT DUTIES TO A STANDARD WHICH WOULD ALLOW HIM TO ADEQUATELY MONITOR THE CO-PILOT'S FLYING PROFILE. PERSONNEL CO-PILOT/FIRST OFFICER TRAINING THE LEFT-SEAT PILOT HAD RECEIVED INAPPROPRIATE TRAINING AS HE HAD ONLY OBSERVED THE PROFILE FROM THE RIGHT SEAT PRIOR TO ATTEMPTING TO FLY IT FROM THE LEFT SEAT. AS WELL, THE MAJORITY OF PROFILES THAT HE HAD OBSERVED HAD DESCENT RATES HIGHER THAN RECOMMENDED.

24. Preventive Measures: (SEE DETAILED DESCRIPTION) *** PREVENTIVE MEASURES *** A CTP WAS DEVELOPED FOR THE LAPES PILOT LEFT-HAND RIGHT-SEAT COURSES. CFACM 60-2601 (1) WAS AMENDED AS FOLLOWS: A. SUITABLE DEFINITION ADDED TO CHAPTER 11, PARA 20 CONCERNING "PREDETERMINED" AND "AIM POINT" TO REFLECT A TRAINING, AND WHENEVER POSSIBLE, OPERATIONAL SCENARIO; B. A CAUTION ADDED TO CHAPTER 11, PARA 21; C. THE WORD "STEEP" AND RECOMMENDED RATES OF DESCENT DELETED, AND THE RECOMMENDED PROFILE TO "AN APPROXIMATE 8 DEGREES GLIDE PATH" ADDED; AND D. A SUITABLE GLOSSARY ADDED. THE IMPORTANCE OF AN EARLY ABORT ON AN UNSATISFACTORY PASS AND REDUCING THE DESCENT RATE ARE INCLUDED IN THOROUGH PRE-FLIGHT BRIEFINGS. IT IS MANDATORY TO CARRY OUT A "DRY-RUN" WITH THE RAMP AND DOOR CLOSED. (SEE DETAILED DESCRIPTION - 1) SELECTION OF CANDIDATES FOR THE LAPES COURSE, EITHER LEFT OR RIGHT SEAT, WILL BE MADE ONLY WITH THE EXPRESS APPROVAL OF SQUADRON COMMANDING OFFICERS. LOADMASTER PROCEDURES FOR DROGUE-TOWS HAVE BEEN CHANGED TO HAVE LOADMASTERS MOVE TO A POSITION FORWARD OF THE RAMP HINGE IMMEDIATELY AFTER A DROGUE CHUTE HAS BEEN MANUALLY DEPLOYED. THERE IS NO REQUIREMENT IN THE TRAINING SCENARIO FOR THE RIGGING OF THE DROGUE CHUTE IN THE AIR DROP SYSTEM (ADS) WHILE AIRBORNE. NO PILOT WILL OCCUPY THE LEFT SEAT DURING LAPES TRAINING WITHOUT HAVING SUCCESSFULLY COMPLETED SUITABLE RIGHT SEAT TRAINING AND DOCUMENTATION, AND ONLY THOSE INDIVIDUALS SPECIFICALLY SELECTED FOR LEFT SEAT TRAINING WILL OCCUPY THAT POSITION DURING ANY LAPES OR LAPES RELATED TRAINING. DEVELOP AND IMPLEMENT A STANDARDS SYSTEM FOR TAL INSTRUCTOR PILOTS. TAL SCHOOL STAFF WILL BE INCLUDED, WHERE POSSIBLE, ON OPERATIONAL LAPES TRIPS ON A REGULARLY SCHEDULED BASIS AS AN ADJUNCT TO PRESCRIBED TRAINING. THE INSTRUCTIONAL CAPABILITIES OF THE LAPES INSTRUCTOR PILOT HAVE BEEN ASSESSED AND GUIDANCE PROVIDED TO ASSIST HIM IN HIS TAL INSTRUCTIONAL DUTIES. THE INSTRUCTOR IN ALL LAPES TRAINING WILL BE DESIGNATED AS THE AIRCRAFT CAPTAIN. THE IMPORTANCE OF THE DECLARATION OF AN EMERGENCY IS INCLUDED IN THE TAL SCHOOL SOPS. THE TAL SCHOOL CONTINUE FILMING EACH PASS DURING THE LAPES COURSE AND AS MANY OTHER LAPES DELIVERIES AS POSSIBLE.