

Recommendation Report

Monday, May 18, 2009

Log Number 2482
Issue Date 2/3/1994

U.S. AIR CARRIER OPERATIONS ARE EXTREMELY SAFE, AND THE ACCIDENT RATE HAS DECLINED IN RECENT YEARS. HOWEVER, AMONG THE WIDE ARRAY OF FACTORS CITED BY THE NATIONAL TRANSPORTATION SAFETY BOARD AS CAUSAL OR CONTRIBUTING TO AIRPLANE ACCIDENTS, ACTIONS OR INACTIONS BY THE FLIGHTCREW HAVE BEEN CITED IN THE MAJORITY OF FATAL AIR CARRIER ACCIDENTS. RECOGNIZING THAT DEFICIENCIES IN VARIOUS ASPECTS OF THE AVIATION SYSTEM MAY UNDERLIE THE ERRORS MADE BY FLIGHTCREWS, THE SAFETY BOARD CONDUCTED A STUDY TO LEARN MORE ABOUT FLIGHTCREW PERFORMANCE BY EVALUATING THE CHARACTERISTICS OF THE OPERATING ENVIRONMENT, THE FLIGHTCREWS AND ERRORS MADE IN MAJOR ACCIDENTS OF U.S. AIR CARRIERS.

Recommendation # A-94-001	Overall Status CAA	Priority CLASS II
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THE NTSB RECOMMENDS THAT THE FEDERAL AVIATION ADMINISTRATION: APPLY THE RESULTS OF RESEARCH CONDUCTED TO DATE ON THE DESIGN AND USE OF CHECKLISTS TO IMPROVE THE ERROR-TOLERANCE OF AIR CARRIER CHECKLIST PROCEDURES FOR TAXI OPERATIONS, BY ENHANCING FLIGHTCREW MONITORING/CHALLENGING OF CHECKLIST EXECUTION, PROVIDING CUES FOR INITIATING CHECKLISTS, AND CONSIDERING TECHNOLOGICAL OR PROCEDURAL METHODS TO MINIMIZE THE OMISSION OF ANY ITEMS ON A CHECKLIST. PROVIDE SPECIFIC GUIDANCE TO AIR CARRIERS FOR IMPLEMENTING THESE PROCEDURES.

FAA	Closed - Acceptable Action	2/18/1997
4/26/1994 Addressee	THE FAA AGREES WITH THIS RECOMMENDATION & IS ISSUING AN ADVISORY CIRCULAR TO ADDRESS THE BOARD'S CONCERNS. PRESENTLY, ORDER 8400.10, AIR TRANSPORTATION OPERATIONS INSPECTOR'S HANDBOOK, CONTAINS EXTENSIVE GUIDANCE ON THE SUBJECT OF CHECKLISTS. THIS GUIDANCE IS BASED ON THE RESULTS OF VARIOUS STUDIES & RESEARCH & IS AVAILABLE TO ALL AIR CARRIERS. THE FAA HAS ALSO DEVELOPED & ISSUED SUBSTANTIVE GUIDANCE ON CRM THAT WILL BE USEFUL TO AIR CARRIERS IN THE DEVELOPMENT & USE OF AIRCREW CHECKLISTS...	
7/6/1994 NTSB	THE BOARD IS PLEASED THAT THE FAA PLANS TO ISSUE AN ADVISORY CIRCULAR THAT ADDRESSES THE BOARD'S CONCERNS. PENDING THE BOARD'S RECEIPT & REVIEW OF THIS AC, A-94-1 IS CLASSIFIED "OPEN-ACCEPTABLE RESPONSE."	
12/18/1996 Addressee	IN A DECEMBER 18, 1996, LETTER THE FAA RESPONDED TO THE BOARD DETAILING ACTIONS TAKEN TO ADDRESS A-94-001. THE FAA'S ACTIONS INCLUDED: (1) MANDATING CRM TRAINING FOR CERTIFICATE HOLDERS REQUIRED TO COMPLY WITH 14 CFR PART 121 TRAINING REQUIREMENTS (2) REVISING ADVISORY CIRCULAR 120-51B "CREW RESOURCE MANAGEMENT TRAINING" TO ADDRESS TRAINING IN CHALLENGING ERRORS INVOLVING INADEQUATELY COMPLETING CHECKLISTS & TO PROVIDE CLARIFYING CRM GUIDANCE IN RESPECT TO CHECKLIST PROCEDURES, (3) ISSUING FLIGHT STANDARDS INFO BULLETIN 95-20, WHICH INSTRUCTS POIS OF 14 CFR PART 121 & 135 CARRIERS TO REEMPHASIZE THE NEED TO STRICTLY COMPLY WITH STANDARD OPERATING PROCEDURES & IN-FLIGHT CHECKLIST PROCEDURES, & (4) ISSUING A REPORT IN JANUARY 1995 ENTITLED "HUMAN PERFORMANCE CONSIDERATIONS IN THE USE & DESIGN OF AIRCRAFT CHECKLISTS," WHICH SUMMARIZES CONTEMPORARY HUMAN FACTORS PRINCIPLES AFFECTING THE DESIGN & USE OF ALL AIRCRAFT CHECKLISTS, NOT ONLY TAXI CHECKLISTS AS STATED IN A-94-001. THE REPORT ALSO PROVIDES GUIDANCE ON CHECKLIST DESIGN.	