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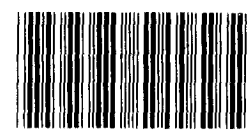
STATEMENT OF  
BALTA E. BIRKLE, DEPUTY DIRECTOR  
COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION  
BEFORE THE  
HOUSE SUBCOMMITTEE ON AVIATION  
OF THE  
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION  
ON

AVIATION SAFETY

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE

WE WELCOME THE OPPORTUNITY TO DISCUSS OUR FEBRUARY 1980,  
REPORT ENTITLED "HOW TO IMPROVE THE FEDERAL AVIATION ADMINIS-  
TRATION'S ABILITY TO DEAL WITH SAFETY HAZARDS" (CED-80-66)  
WHICH RESULTED FROM THE REQUEST OF THE CHAIRMAN OF THE HOUSE  
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION AND THE REQUEST  
OF CONGRESSMAN ELLIOTT H. LEVITAS OF THIS SUBCOMMITTEE. WE  
REVIEWED FAA'S MANAGEMENT EFFORTS TO IDENTIFY, SET PRIORITIES  
FOR, AND DEVELOP TIMELY SOLUTIONS TO SAFETY HAZARDS. SAFETY  
HAZARDS INCLUDE PROBLEM AREAS SUCH AS MIDAIR COLLISIONS,  
CABIN FIRES, AND SEAT DISLOCATIONS DURING CRASH IMPACTS. WE

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DID NOT ASSESS THE TECHNICAL SUFFICIENCY OR REASONABLENESS OF FAA'S APPROACHES AND ITS SOLUTIONS.

REVIEW RESULTS

TO PLACE OUR FINDINGS IN PROPER PERSPECTIVE, I DO WANT TO STRESS THAT WHEN COMPARED WITH OTHER TRANSPORTATION MODES, AVIATION HAS AN ADMIRABLE SAFETY RECORD. YET, FAA CAN ENHANCE AVIATION SAFETY BY FURTHER IMPROVING ITS PERFORMANCE.

THE FAA HAS NOT ALWAYS BEEN EFFECTIVE OR TIMELY IN DEALING WITH SAFETY HAZARDS AND ITS ACTIONS ARE OFTEN PERCEIVED TO BE REACTIVE INSTEAD OF ANTICIPATORY.

LET ME BRIEFLY DESCRIBE THE SEQUENCE IN WHICH SAFETY HAZARDS ARE ADDRESSED. AS A FIRST STEP, THERE MUST BE A SYSTEM FOR IDENTIFYING SAFETY HAZARDS. A COMPREHENSIVE PLANNING PROCESS MUST THEN BE DEVELOPED TO ADDRESS THE SAFETY ISSUES. NEXT, INDIVIDUAL SAFETY PROGRAMS SHOULD BE PLANNED AND APPROVED. CONTROLS MUST BE SYSTEMATICALLY ESTABLISHED TO ENSURE THAT PROGRAMS ARE SUCCESSFULLY IMPLEMENTED AND, ONCE IN PLACE, ARE SUFFICIENTLY EVALUATED AS TO THEIR EFFECTIVENESS.

SAFETY HAZARD IDENTIFICATION

FAA HAS NOT BEEN EFFECTIVE OR TIMELY IN DEVELOPING SYSTEMS TO IDENTIFY SAFETY HAZARDS. IT HAS NOT

--RECOGNIZED THE IMPORTANCE OF HAZARD IDENTIFICATION SYSTEMS,

--EMPHASIZED INFORMATION GATHERING AND ANALYSIS, OR  
--UNDERTAKEN LONG-TERM PLANNING FOR COMPREHENSIVE  
IDENTIFICATION SYSTEMS.

ORGANIZATIONAL PROBLEMS HAVE HAMPERED FAA'S EFFECTIVENESS. FOR EXAMPLE, NO SINGLE INDIVIDUAL OR OFFICE HAS BEEN RESPONSIBLE FOR HAZARD IDENTIFICATION, AND ORGANIZATIONAL CONFLICTS HAVE EXISTED BETWEEN FAA AND THE NATIONAL TRANSPORTATION SAFETY BOARD. TO BETTER UNDERSTAND HOW TO IDENTIFY HAZARDS CAUSED BY HUMAN BEHAVIOR, FAA CONDUCTS HUMAN FACTORS RESEARCH. HOWEVER, PEOPLE INSIDE AND OUTSIDE FAA QUESTION WHETHER THE AGENCY PAYS ENOUGH ATTENTION TO THIS KIND OF RESEARCH. REGARDLESS OF WHETHER SUCH PERCEPTIONS ARE ACCURATE, IT IS CLEAR THAT AN AGENCYWIDE APPROACH TO HAZARD IDENTIFICATION IS WARRANTED.

#### COMPREHENSIVE PLANNING PROCESS

FAA DOES NOT HAVE A COMPREHENSIVE PLANNING PROCESS FOR ADDRESSING AVIATION SAFETY ISSUES. SUCH A PROCESS IS NEEDED TO GIVE MANAGEMENT A FRAME OF REFERENCE FOR PLANNING, APPROVING, IMPLEMENTING, AND EVALUATING SPECIFIC SAFETY PROJECTS. TOP MANAGEMENT'S LACK OF ATTENTION TO PLANNING HAS CONTRIBUTED TO UNTIMELY OR INEFFECTIVE APPROACHES FOR ADDRESSING SOME SAFETY HAZARDS.

#### INDIVIDUAL SAFETY PROGRAM PLANS

FAA DOES NOT HAVE AN ADEQUATE SYSTEM FOR PREPARING, REVIEWING, AND APPROVING INDIVIDUAL AGENCYWIDE SAFETY

PROJECT PLANS. OUR REVIEW DISCLOSED THAT WITHOUT SUCH PLANS,

--PRIORITIES WERE NOT ASSIGNED AGENCYWIDE AND WERE NOT CONSISTENTLY APPLIED.

--REQUIREMENTS WERE NOT SPECIFICALLY DEFINED.

--COSTS AND BENEFITS WERE NOT CONSIDERED AT THE EARLIEST STAGES.

--INTERIM CORRECTIVE ACTIONS WERE NOT AGGRESSIVELY EXPLORED.

--COORDINATION WAS NOT ASSURED.

--STAFFING IMPLICATIONS WERE NOT PROPERLY ADDRESSED.

--ACCOUNTABILITY WAS NOT ADEQUATELY ESTABLISHED.

FOR EXAMPLE, FAA BEGAN A HIGH PRIORITY PROJECT IN OCTOBER 1973 TO DEVELOP A CHILD RESTRAINT DEVICE FOR AIRCRAFT USE. THE PROJECT WAS INITIATED BECAUSE INFANTS HAD BEEN INJURED DURING TURBULENCE, HARD LANDINGS, AND STOPPAGE OF AIRCRAFT. PRIORITY ON THIS PROJECT WAS LATER DOWNGRADED, AND IN MAY 1978 THE PROJECT WAS CANCELED. NOT UNTIL AFTER A DECEMBER 1978 AIR CARRIER ACCIDENT IN PORTLAND, OREGON, IN WHICH TWO INFANTS DIED, DID FAA ESTABLISH ANOTHER HIGH PRIORITY PROJECT TO DEVELOP A CHILD RESTRAINT DEVICE.

ANOTHER EXAMPLE WAS THE LACK OF INTERNAL COORDINATION AND THE DISAGREEMENTS OVER POLICY, APPROACH, AND DIRECTION TO DEAL WITH MIDAIR COLLISIONS. ONLY AFTER THE SEPTEMBER 1978

SAN DIEGO MIDAIR COLLISION DID FAA DEVELOP A COORDINATED AGENCYWIDE PLAN TO ADDRESS THIS HAZARD. THE FAA ADMINISTRATOR ACKNOWLEDGED IN DECEMBER 1978 THAT THE ACCIDENT CAUSED FAA TO FOCUS SYSTEMWIDE ON THE GENERAL THREAT OF MIDAIR COLLISIONS.

MANAGEMENT CONTROLS DURING IMPLEMENTATION

FAA DOES NOT HAVE AN ADEQUATE SYSTEM OF CONTROLS TO GOVERN THE IMPLEMENTATION PHASE OF SAFETY PROJECTS. THESE CONTROLS WOULD ASSIST FAA IN CONDUCTING ITS SAFETY WORK IN A MORE TIMELY AND EFFECTIVE MANNER AND HELP ASSURE THAT COMMITMENTS ON INDIVIDUAL SAFETY EFFORTS ARE MET.

IMPORTANT INFORMATION ABOUT FAA'S SAFETY PROJECTS HAS NOT BEEN ADEQUATELY OR CONSISTENTLY DOCUMENTED. ITEMS WHICH WERE EITHER NOT MAINTAINED IN AGENCY PROJECT FILES OR WERE MAINTAINED IN VARYING DEGRESS OF QUALITY INCLUDE

- PROJECT PLANNING DOCUMENTS (ORIGINALS AND ANNUAL UPDATED REVISIONS);
- MODIFICATIONS TO OR DEVIATIONS FROM THE PLAN RELATIVE TO PRIORITY, REQUIREMENTS, COST-BENEFIT ANALYSES, INTERIM CORRECTIVE ACTIONS, ACCOUNTABILITY, ETC.;
- PROGRESS REPORTS AND PROGRAM REVIEW RESULTS;
- EVIDENCE OF INTERNAL COORDINATION;
- SUMMATION OF STAFF TIME CHARGED TO THE PROJECT; AND
- DESCRIPTION OF ANY FACTORS AFFECTING THE TIMELINESS AND EFFECTIVENESS OF THE WORK.

BY DOCUMENTING RESULTS OF DECISIONMAKING, MANAGEMENT CAN ASSURE ITSELF THAT EVENTS AND THE CIRCUMSTANCES SURROUNDING THEM ARE ACCURATELY RECORDED AND UNDERSTOOD BY ALL AFFECTED PARTIES. DOCUMENTATION FACILITATES COORDINATION AND COMMUNICATION BECAUSE IT IS IN WRITTEN FORM. WITHOUT IT, THE RECONSTRUCTION OF PAST EVENTS OR AGREEMENTS RELIES COMPLETELY ON THE MEMORY OF KEY PARTICIPANTS THAT MAY OR MAY NOT BE AVAILABLE. LACK OF DOCUMENTATION, ESPECIALLY IN AN ENVIRONMENT WITH A RELATIVELY HIGH RATE OF STAFF TURNOVER, MAKES IT VERY DIFFICULT FOR NEW STAFF TO BE FULLY PRODUCTIVE.

ONCE A COMMITMENT TO SOLVE OR REDUCE A SAFETY HAZARD HAS BEEN MADE AND A PLAN HAS BEEN PREPARED, THE MONITORING OF ACTUAL PERFORMANCE WILL INDICATE THE PROGRESS BEING MADE. WITHOUT SUFFICIENT MONITORING, MANAGEMENT LACKS KNOWLEDGE ON WHICH TO EVALUATE PERFORMANCE.

#### EVALUATIONS

PROGRAM EVALUATION IS AN INTEGRAL PART OF EFFECTIVE MANAGEMENT. IT PROVIDES THE FEEDBACK WHICH AN AGENCY NEEDS TO MEASURE PERFORMANCE AGAINST OBJECTIVES AND, WHEN NECESSARY, TO REDEFINE THOSE OBJECTIVES. AN EFFECTIVE SYSTEM FOR OBJECTIVELY EVALUATING THE EFFECTS OF ITS PROGRAMS WOULD BE ESPECIALLY VALUABLE FOR AN AGENCY LIKE FAA WHICH IS RESPONSIBLE FOR REGULATING A DYNAMIC FIELD SUCH AS AVIATION.

IN RECENT YEARS, HOWEVER, EVALUATION HAS RECEIVED LITTLE PRIORITY AND HAS DIMINISHED IN USE AT FAA. THOUGH ASSIGNED

MAJOR EVALUATIVE FUNCTIONS, THE OFFICE OF AVIATION SAFETY AND THE PROGRAM REVIEW STAFF, OFFICE OF THE ASSOCIATE ADMINISTRATOR FOR ADMINISTRATION, HAVE EITHER NOT CARRIED THEM OUT OR DID NOT PROVIDE FOR APPROPRIATE INDEPENDENCE IN PERFORMING SUCH FUNCTIONS. FURTHER, FAA HAS NOT ALWAYS EVALUATED THE EFFECTIVENESS OF NONREGULATORY ACTIONS THAT ADDRESSED SAFETY PROBLEMS AND DID NOT REQUIRE THAT SUCH EVALUATIONS BE MADE.

#### RECOMMENDATIONS

WE MADE NUMEROUS RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION WHICH, IF IMPLEMENTED, SHOULD IMPROVE FAA'S PROCEDURES, PROCESSES AND CONTROLS AND WOULD ENABLE FAA TO RESPOND MORE QUICKLY AND EFFECTIVELY TO AVIATION SAFETY PROBLEM AREAS. ONE OF OUR RECOMMENDATIONS CALLED ON FAA TO ESTABLISH A TOP MANAGEMENT GROUP, WHICH MIGHT BE CALLED THE ADMINISTRATOR'S SAFETY ADVISORY GROUP, TO IDENTIFY OVERALL SAFETY PRIORITIES AND TO REVIEW AND APPROVE SPECIFIC AND DETAILED SAFETY PROJECT PLANS.

#### AGENCY REACTION AND OUR ASSESSMENT

THOUGH CONCURRING WITH MANY OF OUR FINDINGS AND OBSERVATIONS, THE AGENCY IN COMMENTING ON OUR DRAFT REPORT DID NOT CLEARLY ADDRESS, OR DID NOT ADDRESS AT ALL, MOST OF OUR SPECIFIC CONCLUSIONS AND RECOMMENDATIONS. THE DEPARTMENT OF TRANSPORTATION BELIEVED THAT RECENT ACTIONS TAKEN AND TO BE TAKEN WITHIN FAA WOULD ACCOMPLISH THE SAME RESULTS AS OUR RECOMMENDATIONS. THESE ACTIONS INCLUDE CHANGES TO THE

ORGANIZATIONAL STRUCTURE UNDER AN ASSOCIATE ADMINISTRATOR FOR AVIATION STANDARDS, INCLUDING THE ESTABLISHMENT OF A SAFETY ORIENTED ORGANIZATIONAL COMPONENT, AND CHANGES TO THE REGULATORY PROCESS.

WHILE THESE ACTIONS HAVE THE POTENTIAL FOR IMPROVING FAA'S OPERATIONS, THEY DO NOT INCLUDE THE SPECIFIC IMPROVEMENTS WE RECOMMENDED IN FAA'S PROCEDURES, PROCESSES, AND CONTROLS. WE ARE MORE ENCOURAGED, HOWEVER, BY THE DEPARTMENT'S MAY 2, 1980, RESPONSE TO OUR FINAL REPORT EVEN THOUGH IT DID NOT ADDRESS OUR SPECIFIC RECOMMENDATIONS. THE DEPARTMENT STATED THAT IT WAS TAKING ADDITIONAL ACTION WITH RESPECT TO THE FIVE AREAS CITED IN OUR REPORT REGARDING FAA-WIDE PLANNING, PRIORITIES, AND DECISIONMAKING IN ALL MAJOR MISSION AREAS. IT ALSO STATED THAT THE FAA ADMINISTRATOR HAD DIRECTED THAT A COMPREHENSIVE SET OF IMPROVEMENTS TO THE OVERALL PROCESS BE DEVELOPED. IN THIS REGARD, THE DEPARTMENT STATED THAT CAREFUL CONSIDERATION WOULD BE GIVEN TO THE GAO OBSERVATIONS. WE WILL PERIODICALLY CONDUCT FOLLOWUP WORK TO DETERMINE AND ASSESS ACTIONS TAKEN BY FAA IN RESPONSE TO OUR REPORT RECOMMENDATIONS.

MISTER CHAIRMAN, THIS CONCLUDES MY STATEMENT. WE WILL BE GLAD TO RESPOND TO YOUR QUESTIONS.