Docket No.: **SA-510**
Exhibit No.: **9I**

NATIONAL TRANSPORTATION SAFETY BOARD

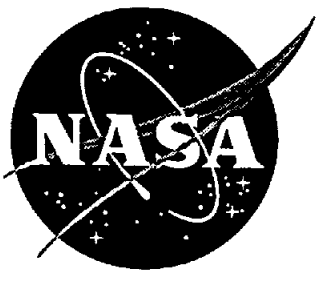
Washington, D.C.

NASA Aviation Safety Reporting System (ASRS)
Search Request No. 3656
Boeing 737 Type Reports

Search Request No. 3656

B737-Type Reports

September 12, 1994



Aviation Safety Reporting System
625 Ellis St. Suite 305 Mountain View California 94043

Battelle
... Putting Technology to Work
ASRS Office
625 Ellis Street
Suite 305
Mountain View, California 94043
Telephone (415) 969-3969

November 9, 1994

Mr. Jim Guzzetti
NTSB
19518 Pacific Highway South
Room 201
Seattle, WA 98188

Dear Mr. Guzzetti:

SEARCH REQUEST NO. 3740: "B737-TYPE REPORTS"

In response to a request of NASA's Aviation Safety Reporting System, enclosed is a printout containing 181 B737-type aircraft reports broken down into the following categories: thrust reverser incidents (135 reports) and rudder incidents (16 reports) and engine anomalies incidents (30 reports). Attached is an explanation of the coded information contained in your printout.

At the time of this search, the ASRS database contained 46,798 full-form records received since January 1, 1986. There were also 117,772 abbreviated-form records in the database, but since incidents involving the above-mentioned topics are not identifiable in these records, they were excluded from the search. Our information search was also expanded to include pertinent reports identified in prior ASRS search requests, ASRS/FAA teleconferences, and ASRS alert messages. The reports in the enclosed data set are the summary results of all these searches.

Please bear in mind that the ASRS did not retain aircraft make-model identities in its database before January 1, 1994. Thus, with the exception of reports with occurrence dates on or after January 1, 1994, we cannot confirm that the reports in the enclosed printout relate to a B737-300. The search strategy used for this printout sought reports involving aircraft identified by two engines and in the weight classifications of 60,001-150,000 lbs. Therefore, it is possible that some of the involved aircraft were other B737 variants, or a McDonnell-Douglas MD80 series aircraft. It should also be remembered that ASRS reports are submitted voluntarily and are subject to self-reporting biases. In many instances, reported occurrences have not been corroborated by FAA or NTSB investigations.

We hope you find this information useful for your purposes. Please note with care the attached caveat regarding statistical use of ASRS information and the point Mr. Reynard makes in his covering memorandum to recipients. We would appreciate any comments you have regarding the value of this service. If you have any questions or comments, please do not hesitate to contact us at (415) 969-3969.

Sincerely,

[redacted]
Stephanie M. Frank
ASRS Researcher

[redacted]
Vincent J. Mellone
ASRS Deputy Program Manager

SMF

National Aeronautics and
Space Administration
Ames Research Center
Moffett Field, CA 94035-1000

Reply to Attn of: FL:262-1

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded of the following points which must be considered when evaluating these data.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the national aviation system.

Reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information may or may not be correct in any or all respects. At best, it represents the perception of a specific individual who may or may not understand all of the factors involved in a given issue or event.

After preliminary processing, all ASRS reports are deidentified. There is no way to identify the individual who submitted a report. All ASRS records systems are designed to prevent any possibility of identifying individuals submitting, or other names, in ASRS reports. There is, therefore, no way to verify information submitted in an ASRS report after it has been deidentified.

The National Aeronautics and Space Administration and its ASRS contractor, Battelle Memorial Institute, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

[redacted]
William Reynard, Director
Aviation Safety Reporting System

CAVEAT REGARDING STATISTICAL USE OF ASRS INFORMATION

Certain caveats apply to the use of ASRS statistical data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations which occur, or it may be just a small fraction of total occurrences. We have no way of knowing which.

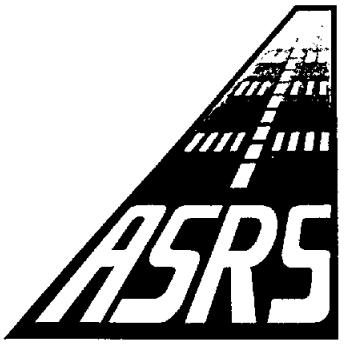
Moreover, not all pilots, controllers, air carriers, or other participants in the aviation system, are equally aware of the ASRS or equally willing to report to us. Thus, the data reflect **reporting biases**. These biases, which are not fully known or measurable, distort ASRS statistics. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area "A" than area "B" simply because the airmen who operate in area "A" are more supportive of the ASRS program and more inclined to report to us should an NMAC occur.

Only one thing can be known for sure from ASRS statistics–they represent the **lower measure** of the true number of such events which are occurring. For example, if ASRS receives 300 reports of track deviations in 1993 (this number is purely hypothetical), then it can be known with certainty that at least 300 such events have occurred in 1993.

Because of these statistical limitations, we believe that the **real power** of ASRS lies in the **report narratives**. Here pilots, controllers, and others, tell us about aviation safety incidents and situations in detail. They explain what happened, and more importantly, **why** it happened. Using report narratives effectively requires an extra measure of study, the knowledge derived is well worth the added effort.

For a text on the strengths and limitations of incident data, the process of using incidents for human factors evaluations, statistical analysis methods and other sources of incident data, see:

Chappell, S.L. (1994). Using voluntary incident reports for human factors evaluations. In N. Johnston, N. McDonald & R. Fuller (Eds.), Aviation Psychology in Practice. Aldershot, England: Ashgate.



The Aviation Safety Reporting System

The Aviation Safety Reporting System (ASRS) was established in 1975 under a Memorandum of Agreement between the Federal Aviation Administration (FAA) and the National Aeronautics and Space Administration (NASA). FAA provides most of the program funding; NASA administers the program and sets its policies in consultation with the FAA and the aviation community. NASA has chosen to operate the program through a contractor selected via competitive bidding. The current contractor is Battelle.

Purposes of the Program

The ASRS collects, analyzes, and responds to voluntarily submitted aviation safety incident reports in order to lessen the likelihood of aviation accidents. ASRS data are used to:

- Identify deficiencies and discrepancies in the National Aviation System (NAS) so that these can be remedied by appropriate authorities.
- Support policy formulation and planning for, and improvements to, the NAS.
- Strengthen the foundation of aviation human factors safety research. This is particularly important since it is generally conceded that over two-thirds of all aviation accidents and incidents have their roots in human performance errors.

Confidentiality and Incentives to Report

Pilots, air traffic controllers, flight attendants, mechanics, ground personnel, and others involved in aviation operations submit reports to the ASRS when they are involved in, or observe, an incident or situation in which aviation safety was compromised. All submissions are voluntary.

Reports sent to the ASRS are held in strict confidence. More than 250,000 reports have been submitted to date and no reporter's identity has ever been breached by the ASRS. ASRS de-identifies reports before entering them into the incident database. All personal and organizational names are removed. Dates, times, and related information, which could be used to infer an identity, are either generalized or eliminated.

The FAA offers ASRS reporters further guarantees and incentives to report. It has committed itself not to use ASRS information against reporters in enforcement actions. It has also chosen to waive fines and penalties, subject to certain limitations, for unintentional violations of federal aviation statutes and regulations which are reported to ASRS. The FAA's initiation, and continued support, of the ASRS program and its willingness to waive penalties in qualifying cases is a measure of the value it places on the safety information gathered, and the products made possible, through incident reporting to the ASRS.

Report Processing

Incident reports are read and analyzed by ASRS's corps of aviation safety analysts. The analyst staff is composed entirely of experienced pilots and air traffic controllers. Their years of experience are uniformly measured in decades, and cover the full spectrum of aviation activity: air carrier, military, and general aviation; Air Traffic Control in Towers, TRACONS, Centers, and Military Facilities.

Each report received by the ASRS is read by a minimum of two analysts. Their first mission is to identify any aviation hazards which are discussed in reports and flag that information for immediate action. When such hazards are identified, an alerting message is issued to the appropriate FAA office or aviation authority. Analysts' second mission is to classify reports and diagnose the causes underlying each reported event. Their observations, and the original de-identified report, are then incorporated into the ASRS's database.

Database

The database provides a foundation for specific products and subsequent research addressing a variety of aviation safety issues. ASRS's database includes the narratives submitted by reporters (after they have been sanitized for identifying details). These narratives provide an exceptionally rich source of information for policy development and human factors research. The database also contains coded information from the original report which is used for data retrieval and statistical analyses.

continued over...

Program Outputs

ASRS uses the information it receives to promote aviation safety in a number of ways:

- **Alerting Messages.** When ASRS receives a report describing a hazardous situation—for example, a defective navigation aid, mischarting, a confusing procedure, or any other circumstance which might compromise safe flight—it issues an alerting message. Alerting messages take a variety of forms but they have a single purpose: to relay safety information to individuals in a position of authority so that they can investigate the allegation and take needed corrective actions. ASRS has no direct operational authority of its own. It acts through, and with the cooperation of, others.
- **CALLBACK.** ASRS distributes CALLBACK, a monthly safety bulletin, to more than 72,000 pilots, air traffic controllers, and others. Each issue of CALLBACK includes excerpts from ASRS incident reports with supporting commentary. In addition, CALLBACK may contain summaries of ASRS research studies and related aviation safety information. CALLBACK is one of the ASRS's most effective tools for improving the quality of human performance in the NAS at the grass roots level. Editorial use and reproduction of CALLBACK articles, with appropriate attribution, is encouraged.
- **ASRS Directline.** New in 1991, ASRS Directline is published periodically to meet the needs of operators and flight crews of complex aircraft, such as commercial carriers and corporate fleets. Articles contained in Directline are based on ASRS reports that have been identified as significant by ASRS analysts. Distribution is directed to operational managers, safety officers, training organizations, and publications departments. Editorial use and reproduction of Directline articles, with appropriate attribution, is encouraged.
- **Database Search Requests.** Information in the ASRS database is available to interested parties. Individuals and organizations wishing to access ASRS data on a particular aviation safety subject may contact the ASRS with a statement of need. The ASRS will then search its database for pertinent reports and will print, bind, and mail any information applicable to the request. To date more than 3,000 searches have been accomplished in support of government, industry, and academe.
- **Operational Support.** Through frequent communications between the two organizations, the ASRS contributes to the FAA's ongoing safety efforts. The ASRS also supports the FAA and the NTSB during rule-makings, procedure/airspace design efforts, accident investigations, and like circumstances by assembling and digesting relevant information from its database. This is a growing role for the ASRS.
- **Topical Research.** ASRS has conducted and published over 50 research studies. ASRS research has always been designed and conducted with an orientation toward real-life operational applications; most have examined human performance in the NAS. Ways are sought to effect incremental improvements in aviation safety through improved procedures, training, design, etc. Recent subjects of ASRS research include: runway transgressions, TCAS II incident analysis, air carrier ground deicing, EMS helicopter incidents, flight deck confusion, GA landing incidents, time pressure in aviation incidents, loss of communication, TCA boundary conflicts, TCA incursions, ATC communication and workload issues, and safety challenges posed by advanced cockpit aircraft.

Summary

The ASRS is a small but important facet of the continuing effort by government, industry, and individuals to maintain and improve aviation safety. The ASRS collects voluntarily submitted aviation safety incident/situation reports from pilots, controllers, and others. The ASRS acts on the information these reports contain. It identifies system deficiencies, and issues alerting messages to persons in a position to correct them. It educates through its newsletter CALLBACK, its journal ASRS Directline and through its research studies. Its database is a public repository which serves the FAA's and NASA's needs and those of other organizations world-wide which are engaged in research and the promotion of safe flight.

Limitations

1. The ASRS assurance of confidentiality and the availability of waivers of disciplinary action do **NOT** extend to reports of accidents or criminal activity (e.g., hijacking, bomb threats, and drug running). Such reports should not be submitted to ASRS. If such reports are received, they are forwarded identified to cognizant agencies.
2. FAA policies regarding the ASRS are covered by Advisory Circular 00-46C, FAR 91.25, and paragraph 2-38 in the "Facility Operations and Administration" handbook (7210.3K). The waiver of penalties is subject to the following limitations: (A) the alleged violation must be inadvertent and not deliberate, (B) it must not reveal an event subject to section 609 of the federal aviation act, (C) the reporter must not have been found guilty of a violation of the FARs or the Federal Aviation Act during the preceding five years, and (D) the ASRS report must be submitted within 10 days of the event.
3. The ASRS professional staff is composed of retired controllers, as well as both active and retired pilots. To avoid conflicts of interest, ASRS analysts, researchers, and management personnel are not permitted to have ongoing employment relationships with the FAA, air carriers, or similar organizations.
4. ASRS's mailing address is: P.O. Box 189, Moffett Field, California, 94035-0189.

Your printout from the ASRS includes information on the following categories. Please note–each entry in a category is separated by a semicolon (e.g., two SMAs in one incident would be coded as "SMA;SMA;" in the Aircraft Type category.

Accession Number - a unique, sequential number assigned to each report.

Date of Occurrence - the date of the occurrence/situation in the form of a year and a month; e.g., 9304 represents April 1993.

Reported by - role of the person who reported the occurrence/situation. Codes used are: FLC–flight crew; PLT–pilot; CRM–crew member; CTLR–Air Traffic Controller; PAX–passenger; OBS–observer; AFC (or AIR)–Air Force; NVY–Navy; UNK–unknown.

Persons Functions - description of a person's function at the time of the occurrence. Codes used are:

FLC	PIC	-	Pilot in command as determined by official designation, prior consensus, or actually controlling the aircraft
	CAPT	-	Captain role in a multi-person flight crew
	FO	-	First Officer/Copilot role in a multi-person flight crew
	SO	-	Second Officer/Flight Engineer role in a multi-person flight crew
	OTH	-	Additional crew member (e.g., navigator) in a multi-person flight crew
	CKP	-	Check pilot (essential flight crew member occupying a crew position/role)
	ISTR	-	Legally qualified flight instructor who is giving instruction at the time of the occurrence/situation
	PLT	-	Pilot in a single-person crew
	TRNEE	-	Flight crew member in training.

TWR	LC	-	Local controller	COORD	-	Coordinator position
	GC	-	Ground controller	CD	-	Clearance delivery
	FD	-	Flight data position	SUPVR	-	Supervisor
	OTH	-	Other	TRNEE	-	Trainee
TRACON	AC	-	Approach controller	COORD	-	Coordinator position
	DC	-	Departure controller	SUPVR	-	Supervisor
	RHO	-	Radar hand-off position	OTH	-	Other
	FD	-	Flight data position	TRNEE	-	Trainee
ARTCC	M	-	Manual controller	COORD	-	Coordinator position
	R	-	Radar controller	SUPVR	-	Supervisor
	H	-	Hand-off position	OTH	-	Other
	D	-	Assistant or data man	TRNEE	-	Trainee
MIL	PAR	-	Precision approach radar	OTH	-	Other
	RSU	-	Runway supervisory unit			
MISC	FSS	-	Flt service station specialist	DISP	-	Dispatcher
	ACI	-	Air carrier inspector	CENR	-	Company enroute check personnel
	UNI	-	Unicom operator			
	FBO	-	Fixed base operator/employee	TADV	-	Tower advisory
	CAB	-	Cabin attendant	AMGR	-	Airport manager
	VD	-	Vehicle driver	OBS	-	Observer
	P AX	-	Passenger	SUPVR	-	Supervisor
	CGP	-	Company ground personnel	OTH	-	Other

Flight Conditions - the weather environment at the time of the occurrence or situation in terms of the conventional definition for flight conditions. Codes used are: VMC–visual meteorological conditions; IMC–instrument meteorological conditions; MXD–mixed flight conditions (both VMC and IMC); MVI–marginal VFR; SVF–special VFR.

Reference Facility ID (or LOC ID) - the standard three-letter (or letter-number combination) location identifier associated with an airport or navigational facility as referenced in the FAA Order 7350.5Z series entitled "Location Identifiers."

Facility Identifier - the standard three-letter (or letter-number combination) location identifier associated with an ATC facility as referenced in the FAA Order 7350.5Z series entitled "Location Identifiers."

Aircraft Type - the aircraft type involved in the incident differentiated by arbitrary gross takeoff weight ranges (military aircraft type are differentiated by function). Codes used re:

SMA	-	small aircraft (less than 5000 lbs)
SMT	-	small transport (5001 - 14,500 lbs)
LTT	-	light transport (14,501 - 30,000 lbs)
MDT	-	medium transport (300,01 - 60,000 lbs)
MLG	-	medium large transport (60,001 - 150,000 lbs)
LRG	-	large transport (150,001 - 300,000 lbs)
HVT	-	large transport (over 300,000 lbs)
WDB	-	wide-body (over 300,000 lbs)
ULT	-	ultralight (including hang gliders)
SPN	-	sailplane/glider
SPC	-	special purpose
FGT	-	fighter
BMB	-	bomber
MLT	-	military transport
MTR	-	military trainer

Anomaly (Descriptions, Detector, Resolution, Consequences) - short summary of a standard chain of sub-events within a reported incident.

Situation Report Subjects - description(s) of a static hazard which creates a safety problem.

ANOMALY DEFINITIONS

ACFT EQUIPMENT PROBLEM/CRITICAL - Aircraft equipment problem that is vital to the safety of the flight.

ACFT EQUIPMENT PROBLEM/LESS SEVERE - Not qualifying as a critical aircraft equipment problem.

ALT DEVIATION - A departure from or failure to attain or failure to maintain an ATC assigned altitude. It does not include an injudicious or illegal altitude in VFR flight where no altitude has been assigned by ATC or specified in pertinent charts.

ALT DEV/OVERSHOOT - An aircraft climbs or descends through the assigned altitude.

ALT DEV/UNDERSHOOT ON CLB OR DES - An aircraft fails to reach an assigned altitude during climb or descent.

ALT DEV/EXCURSION FROM ASSIGNED - An aircraft departs from level flight at an assigned altitude.

ALT DEV/XING RESTRICTION NOT MET - Charted or assigned altitude crossing restriction is not met.

ALT-HDG RULE DEVIATION - Cruise flight contrary to the altitudes specified in FAR 91.159.

CONFLICT/NMAC (NEAR MIDAIR COLLISION) - A conflict is defined as the existence of a perceived separation anomaly such that the pilot(s) of one or both aircraft take evasive action; or are advised by ATC to take evasive action; or experience doubt about assurance of continuing separation from the viewpoint of one or more of the pilots or controllers involved. A near midair collision is when the flight crew reports, either directly or as quoted by the controller, that the reported miss distance is less than 500 feet.

CONFLICT/AIRBORNE LESS SEVERE - A conflict not qualifying as a NMAC.

CONFLICT/GROUND CRITICAL - A ground occurrence that involves (1) two or more aircraft, at least one of which is on the ground at the time of the occurrence, or (2) one or more aircraft conflicting with a ground vehicle. The flight crew reports, either directly or as quoted by a controller, that they took evasive action to avoid a collision (emergency action go-around, veering on runway or taxiway, takeoff abort, or emergency braking), and the balance of the report, including the narrative is judged consistent with a critical occurrence.

CONFLICT/GROUND LESS SEVERE - A ground conflict not qualifying as critical.

CONTROLLED FLT TOWARD TERRAIN - Flying at an altitude that would, if continued, result in contact with terrain.

ERRONEOUS PENETRATION OF OR EXIT FROM AIRSPACE - Self-explanatory.

IN-FLT ENCOUNTER/OTHER - In-flight encounter (e.g., bird strikes, weather balloons).

IN-FLT ENCOUNTER/WX - In-flight encounter with weather (e.g., wind shear, turbulence, clouds, high winds, storms).

LESS THAN LEGAL SEPARATION - Less than standard separation between two airborne aircraft (as standard separation is defined for the airspace involved).

LOSS OF ACFT CONTROL - Self-explanatory.

NON -ADHERENCE LEGAL RQMT/CLNC - Non-adherence to an ATC clearance.

NON-ADHERENCE LEGAL RQMT/FAR - Non-adherence to a Federal Aviation Regulation.

NON-ADHERENCE LEGAL RQMT/PUBLISHED PROC - Non-adherence to approach procedure, standard instrument departure, STAR, profile descent, or operational procedure as described in the AIM or ATC facility handbook.

NON-ADHERENCE LEGAL RQMT/OTHER - Non-adherence to SOPs for aircraft, company SOPs, etc.

RWY OR TXWY EXCURSION - An aircraft exits the runway or taxiway pavement.

RWY TRANSGRESS/OTHER - The erroneous or improper occupation of a runway or its immediate environs by an aircraft or other vehicle so as to pose a potential collision hazard to other aircraft using the runway, even if no such other aircraft were actually present.

RWY TRANSGRESS/UNAUTH LNDG - A runway transgression specifically involving landing without a landing clearance or landing on the wrong runway.

SPEED DEVIATION - Aircraft speed contrary to FARs or controller instruction.

TRACK OR HDG DEVIATION - Self-explanatory.

UNCTRL ARPT TRAFFIC PATTERN DEVIATION - Failure to fly the prescribed rectangular pattern or failure to enter on a 45 degree angle to the downwind leg.

VFR IN IMC - Flight conducted under Visual Flight Rules (VFR) into Instrument Meteorological Conditions (IMC) when not on an instrument flight plan and/or when not qualified to fly under Instrument Flight Rules (IFR).

B737-TYPE RUDDER REPORTS

ACCESSION NUMBER : 55377
DATE OF OCCURRENCE : 8607
REPORTED BY : FLC
PERSONS FUNCTIONS : FLC,PIC.CAPT;FLC,FO;MISC,CAB;ARTCC,RDR
FLIGHT CONDITIONS : VMC
AIRCRAFT TYPE : MLG
ANOMALY DESCRIPTIONS : LOSS OF ACFT CONTROL;ALT DEV/EXCURSION FROM ASSIGNED;ACFT EQUIPMENT PROBLEM/LESS SEVERE;
ANOMALY CONSEQUENCES : FLC/ATC REVIEW;
SITUATION REPORT SUBJECTS : ACFT EQUIPMENT;
NARRATIVE : CRUISING APPROX 300 MILES ENE OF DENVER AT FL350. THE ACFT ROLLED SHARPLY LEFT AND THE AUTOPLT DISENGAGED. THE ACFT REQUIRED NEARLY FULL RIGHT AILERON TO CORRECT THE ROLL. THE YAW DAMPER WAS IMMEDIATELY TURNED OFF TO NO AVAIL. AS A RESULT OF THE ROLL THE ACFT LEFT FL350. AN EMER WAS DECLARED. THE DESCENT WAS CONTINUED TO FL310. AFTER LEVELING AT FL310 THE **RUDDER** TRIM WAS OBSERVED TO HAVE TRAVELED FULL LEFT. THE ACFT FLEW CORRECTLY ONCE THE TRIM WAS RETURNED TO NEUTRAL. THE TRIM WAS MONITORED UNTIL LANDING WITH NO RECURRENCE OF RUNAWAY TRIM. I SUSPECT A VISITING FLT ATTENDANT TO HAVE INADVERTENTLY ACTIVATED THE UNGUARDED **RUDDER** TRIM WITH HER FOOT.
SYNOPSIS : CABIN ATTENDANT INADVERTENTLY ACTIVATED THE ELECTRIC TRIM SWITCH FOR THE **RUDDER** RESULTING IN FULL **RUDDER** TRIM.
CALLBACK/COMMENTS : RPTR ADVISED THE **RUDDER** TRIM CONTROL WAS IN FACT CONTROLLED BY AN ELECTRIC SWITCH ON THIS ACFT. DISCUSSED THE SITUATION WITH COMPANY AND THEY ARE IN THE PROCESS OF DESIGNING AND PUTTING A GUARD OVER THE SWITCH. COMPLAINED OF THE CB LABELLING BEING VERY HARD TO READ AT NIGHT DUE TO THE COLOR OF LETTERING USED, GOLD AND WHITE. IN GENERAL VERY PLEASED WITH THE ACFT.
LOC ID (LOCATION IDENTIFIER) : ZDV;DEN
AIRCRAFT TYPE : MLG
CREW SIZE : 2
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET
NUMBER OF ENGINES : 2
ADVANCED COCKPIT : NAVCTL
OPERATOR ORGANIZATION : ACR
OPERATION : PAX
FLIGHT PLAN TYPE : IFR
FLIGHT PHASE : CRS,
AIRCRAFT SUBSYSTEMS : ACTIVD.2720.DESC,POSITIVE.2720.RFX, DESIGN.2720.AFX
AIRCRAFT POINTER : P1,P2,P3
AIRCRAFT HANDLE : A1

(REPORT CONTINUED)

```
ADVANCED COCKPIT                : NAVCTL;
OPERATOR ORGANIZATION           : ACR;
OPERATION                       : PAX;
FLIGHT PLAN TYPE                : IFR;
FLIGHT PHASE                    : TKOF,ICLB;
SPECIAL ROUTE                   : ;
AIRCRAFT HANDLE                 : A1;
```

ACCESSION NUMBER : 99539
DATE OF OCCURRENCE : 8811
REPORTED BY : FLC; ; ; ;
PERSONS FUNCTIONS : FLC,CHKPLT.FO; FLC,CAPT; TWR,LC; MISC, GNDCREW;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : LAS
FACILITY STATE : NV
FACILITY TYPE : TWR; ARPT;
FACILITY IDENTIFIER : LAS; LAS;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/LESS SEVERE; OTHER;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : NOT RESOLVED/OTHER;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; PROC OR POLICY/COMPANY;
NARRATIVE : THIS HAZARDOUS INCIDENT OCCURRED ON AN ADVANCED MLG ACFT AND WOULD NOT HAVE BEEN POSSIBLE IN THE OLDER MLG. IT INVOLVES THE **RUDDER** TRIM SYS. WE WERE LATE DUE TO A FUEL GAUGE PROB. WE THOUGHT MAINT WAS DONE TROUBLE-SHOOTING AND WE WAITED ON THE ACFT LOGBOOK. WE ACCOMPLISHED THE BEFORE START CHKLIST AND AS PART OF THAT CHKLIST, CHKED THE **RUDDER** AND AILERON TRIM AT NEUTRAL. MAINT CAME BACK IN THE COCKPIT AND PROCEEDED TO WORK OVER THE PEDESTAL TO SWAP FUEL GAUGES AND FINISH THE LOGBOOK. THE PF WAS A CAPT UPGRADE DOING IOE IN THE LEFT SEAT. WE HAD A STRONG XWIND (20 GUSTING TO 30 KTS) AND NEITHER PLT NOTICED ANYTHING WRONG UNTIL AIRBORNE WHEN INSTEAD OF WX VANING INTO THE WIND WHEN **RUDDER** WAS RELEASED, THE PLANE ROLLED AWAY FROM THE XWIND AND FULL YOKE INTO THE WIND WAS REQUIRED TO STOP THE ROLL. WE THEN DISCOVERED THE **RUDDER** TRIM WAS FULL RIGHT (15 UNITS) OPP THE LEFT XWIND. APPARENTLY THE MECH WHILE WORKING OVER THE PEDESTAL INADVERTENTLY ACTUATED. THE **RUDDER** TRIM WHICH IS ELECTRICALLY OPERATED ON THE MLG. ALL CHKLIST AND COMPANY PROCS WERE FOLLOWED YET THIS STILL OCCURRED. THIS IS AN INHERENTLY BAD DESIGN AND MFG SHOULD KNOW IT! THEY USED A SPLIT SWITCH WITH PROTECTIVE RAILS TO GUARD THE AILERON TRIM, BUT NOTHING GUARDS THE **RUDDER** TRIM SWITCH. THE FAA SHOULD REQUIRE MFG TO MODIFY THIS SWITCH. PERHAPS A SQUEEZE AND TWIST SWITCH OR ONE THAT MUST BE PULLED UP TO ENERGIZE THE **RUDDER** TRIM. AT LEAST MAKE THE SWITCH SHORTER AND PLACE PROTECTIVE RAILS AROUND IT. I IMAGINE THIS SCENARIO MAY ALSO BE POSSIBLE ON OTHER NEW COMPANY SUCH AS THE WDB, LGT AND WDB.
SYNOPSIS : MAINTENANCE WORK BEING DONE IN THE COCKPIT RESULTED IN FULL **RUDDER** TRIM GOING UNNOTICED BY THE FLT CREW.
REFERENCE FACILITY ID : LAS
FACILITY STATE : NV
DISTANCE & BEARING FROM REF. : 1,,N
AGL ALTITUDE : 0,500
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;

ACCESSION NUMBER : 113055
DATE OF OCCURRENCE : 8906
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO; ARTCC,RDR;
FLIGHT CONDITIONS : MXD
REFERENCE FACILITY ID : BWI
FACILITY STATE : MD
FACILITY TYPE : ARTCC;
FACILITY IDENTIFIER : ZDC;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM; NOT RESOLVED/UNABLE;
ANOMALY CONSEQUENCES : NONE;
NARRATIVE : ACFT YAWED VIOLENTLY PASSING 18,000', FOLLOWED IMMEDIATELY BY 2ND YAW WITH RIGHT WING RISING. SINCE AUTOPLT WAS ENGAGED IT WAS DISCONNECTED AND STRONG FORCE USED TO LEVEL WINGS. NO HYD OR FLT CTL LIGHTS. EMER DECLARED AND RETURNED TO BWI. DID NOT USE **RUDDER**, AILERON AND ELEVATOR FELT NORMAL. **RUDDER** FELT NORMAL AFTER LNDG. SUSPECT **RUDDER**, YAW DAMPER, OR AUTOPLT PROBLEM.
SYNOPSIS : ACFT EXPERIENCED VIOLENT YAW AS IT CLIMBED THRU FL180. RETURNED AND LANDED SAFETY AT DEP ARPT.
REFERENCE FACILITY ID : BWI
FACILITY STATE : MD
DISTANCE & BEARING FROM REF. : 55,,NW
MSL ALTITUDE : 18000,18000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : NON;
OPERATOR ORGANIZATION : ACR;
OPERATION : FERRY;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CLB,EMER;
SPECIAL ROUTE : ;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 125797
DATE OF OCCURRENCE : 8910
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,FO; FLC,PIC.CAPT; TRACON,AC;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : ORD
FACILITY STATE : IL
FACILITY TYPE : TRACON;
FACILITY IDENTIFIER : ORD;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : UPON RECEIVING CLRNC TO 8000, I DISCONNECTED THE AUTOPLT AND AUTO THROTTLE AND ELECTED TO MANUALLY FLY THE DSCNT. AS I PITCHED THE NOSE OVER AND CLOSED THE THROTTLES TO BEGIN THE DSCNT, I FELT THE ACFT BEGIN TO YAW, IT FELT EXACTLY LIKE AN ENGINE FAILURE AS I HAD TO APPLY **RUDDER** TO HOLD THE ACFT STRAIGHT. I IMMEDIATELY INFORMED THE CAPT THAT SOMETHING WAS WRONG AND IT FELT LIKE AN ENGINE FAILURE. WE BOTH LOOKED AT THE ENGINE INSTRUMENTS WHICH ALL DISPLAYED NORMAL READINGS AND MATCHED EACH OTHER. ADDITIONALLY THEY ALL INDICATED AN IDLE CONDITION. AS WE REACHED 8000' I PITCHED AND MANUALLY PUSHED UP THE THROTTLES AND HAD TO ADD FURTHER **RUDDER** INPUT TO HOLD HDG. AT THIS TIME I REACHED UP AND CYCLED THE YAW DAMPENER SWITCH OFF AND ON THINKING THAT THE PROBLEM MIGHT BE IN THE YAW DAMPENER SYSTEM. THIS HAD NO CORRECTIVE EFFECT AT ALL. MY NEXT ACTION WAS TO REACH DOWN TO THE BACK OF THE CENTER CONSOLE TO TRIM OUT THE **RUDDER** PRESSURE I WAS HOLDING. AT THIS TIME I FOUND THE **RUDDER** TRIM TAB POSITION INDICATOR PEGGED ON THE RIGHT SIDE. I BEGAN TO CENTER THE **RUDDER** TRIM WHICH REQUIRED ME TO HOLD IT CONTINUOUSLY AS IT MOTORED BACK. AT THE SAME TIME I RETURNED MY ATTN TO THE INSTRUMENTS AS I WAS HAND FLYING THE ACFT. AT SOME POINT AS THE TRIM WAS ABOUT 2/3 OF THE WAY BACK TOWARD CENTER, I RELEASED THE TRIM KNOB SO AS TO USE MY LEFT HAND TO ADJUST THE THROTTLES. AS I GLANCED DOWN TO PLACE MY LEFT HAND BACK ON THE TRIM KNOB TO FINISH CENTERING THE TRIM, I WAS AMAZED TO SEE THE TRIM RUNNING AWAY TO THE RIGHT. IT WAS MOTORING AS IF THE KNOB WAS TWISTED TO THE RIGHT, BUT THE **RUDDER** TRIM KNOB WAS CENTERED. I TOLD THE CAPT THAT THE **RUDDER** TRIM WAS RUNNING AWAY AT WHICH TIME HE TURNED THE TRIM KNOB LEFT, CENTERED THE TRIM POSITION INDICATOR, RELEASED IT, AND WE HAD NO FURTHER DIFFICULTIES DURING THE REMAINDER OF THE APCH. THERE WAS NO JUMP SEAT RIDER OR COCKPIT VISITOR JUST PRIOR TO THE RUNAWAY, AND WHEN I DISENGAGED THE AUTOPLT THE ACFT WAS IN LEVEL FLT, POWER ON AND IN TRIM. IT IS MY BELIEF THAT THE RUNAWAY BEGAN AT THE TIME OF THE AUTOPLT AUTO THROTTLE DISCONNECT OR SHORTLY THEREAFTER AS THE TIMING WAS JUST ABOUT RIGHT, IE, THE YAW PROBLEM CAME ON SLOWLY AND GOT WORSE. U-ON ARR AT ORD THE PROBLEM WAS WRITTEN UP IN THE MAINT LOG AND WE SPENT ABOUT 15 MINS DEBRIEFING COMPANY MECHANICS. THE ACFT WAS TAKEN OUT OF SERVICE. WE WERE UNABLE TO DUPLICATE THE RUNAWAY ON THE GND.
SYNOPSIS : FLT CREW OF ADVANCED MLG EXPERIENCED A RUNAWAY **RUDDER** TRIM COINCIDENTAL WITH AUTOPLT AND AUTO THROTTLE

ACCESSION NUMBER : 146812
DATE OF OCCURRENCE : 9005
REPORTED BY : FLC; ;
PERSONS FUNCTIONS : FLC,FO; FLC,PIC.CAPT;
FLIGHT CONDITIONS : IMC
REFERENCE FACILITY ID : OAK
FACILITY STATE : CA
FACILITY TYPE : ARPT;
FACILITY IDENTIFIER : OAK;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : OTHER; ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : OTHER;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : WE PICKED UP ACT XXXX IN OAKLAND. ACFT WAS UNPOWERED AND WE PWRED UP WITH GND PWR 90 MINS BEFORE DEP. PERFORMED ORIGINATING CHKS 30 MINS PRIOR TO DEP AND FOUND **RUDDER** TRIM TO BE CENTERED. 5 MINS BEFORE DEP AS I ADJUSTED MY SEAT I NOTICED THE **RUDDER** PEDALS WERE DISPLACED. WE FOUND THE **RUDDER** TRIM TO BE FULLY DEFLECTED TO THE R. WE BELIEVE THE **RUDDER** TRIM ACTUATED BY ITSELF AS THE **RUDDER** TRIM SWITCH WAS NOT TOUCHED THE ENTIRE TIME. THE PWR SOURCE WAS NOT CHANGED, THIS SOUNDS VERY SIMILAR TO LGA AS IT WAS ALSO RAINING IN OAK. I BELIEVE NOW THAT THE **RUDDER** TRIM CAN RUNAWAY AT ANY TIME AND THAT A TRIM-IN-MOTION HORN AND A TKOF TRIM POS WARNING ARE MANDATORY. A SWITCH GUARD WILL NOT SOLVE THE PROBLEM. THANKS FOR THE FIL EXPLAINING HOW TO DETECT TRIM DISPLACEMENT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO. RPTR IS CERTAIN THAT **RUDDER** TRIM INPUT WAS NOT COCKPIT ACTION INDUCED. HE OFFERS THE THEORY THAT THE PREVAILING WX CONDITIONS PRIMARILY RAIN MAY HAVE AFFECTED THE TRIM SWITCHES ALTHOUGH HE ADMITS THAT IT SEEMS UNLIKELY. THE CAPT IS CERTAIN THAT THE TRIM AND **RUDDER** POS WAS CENTERED WHEN CHKED DURING COCKPIT SETUP AND THAT THE MOVEMENT TOOK PLACE THEREAFTER. RPTR STATES THAT HE RECENTLY FLEW A BRAND NEW EXAMPLE OF THIS ACFT AND NOTED THAT IT HAD A MODIFIED TRIM ACTIVATION SYS SO THE PROB HAS BEEN ACTED ON TO SOME EXTENT BY THE ACFT MFR.
SYNOPSIS : FLC DISCOVERS FULL **RUDDER** TRIM INPUT ON ADVTECH MLG DURING PREFLT.
REFERENCE FACILITY ID : OAK
FACILITY STATE : CA
AGL ALTITUDE : 0,0
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : PREFLT;
SPECIAL ROUTE : ;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 148673
DATE OF OCCURRENCE : 9006
REPORTED BY : FLC; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO;
FLIGHT CONDITIONS : MXD
REFERENCE FACILITY ID : ORD
FACILITY STATE : IL
FACILITY TYPE : ARPT; TRACON;
FACILITY IDENTIFIER : ORD; ORD;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/LESS SEVERE;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM; ACFT EQUIP PROBLEM RESOLVED ITSELF;
ANOMALY CONSEQUENCES : NONE;
NARRATIVE : AFTER USING ELECTRIC **RUDDER** TRIM CTL TO TRIM THE ACFT, SYS CONTINUED TO INPUT L **RUDDER** TRIM AFTER CTL KNOB WAS RELEASED AND HAD RETURNED TO CTR POS. ACFT WAS RETRIMMED AND PROB COULD NOT BE DUPLICATED.
SYNOPSIS : ACR MLG HAD A MINOR **RUDDER** TRIM MALFUNCTION.
REFERENCE FACILITY ID : ORD
FACILITY STATE : IL
DISTANCE & BEARING FROM REF. : 30,,SO
MSL ALTITUDE : 15000,15000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CLB;
SPECIAL ROUTE : NON;
AIRCRAFT HANDLE : A1;

(REPORT CONTINUED)

DISCONNECT WHILE DESCENDING.

REFERENCE FACILITY ID	: ORD
FACILITY STATE	: IL
DISTANCE & BEARING FROM REF.	: 30,,SW
MSL ALTITUDE	: 8000,10000
AIRCRAFT INVOLVEMENT	: ANOMALY;
AIRCRAFT TYPE	: MLG;
CREW SIZE	: 2;
WINGS, GEAR, SURFACE, ENGINE	: LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES	: 2;
ADVANCED COCKPIT	: DISPLAY,NAVCTL;
OPERATOR ORGANIZATION	: ACR;
OPERATION	: PAX;
FLIGHT PLAN TYPE	: IFR;
FLIGHT PHASE	: DSCNT;
SPECIAL ROUTE	: VECTOR;
AIRCRAFT HANDLE	: A1;

ACCESSION NUMBER : 166633
DATE OF OCCURRENCE : 9012
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,FO; FLC,PIC.CAPT; TWR,LC;
FLIGHT CONDITIONS : IMC
REFERENCE FACILITY ID : PIT
FACILITY STATE : PA
FACILITY TYPE : ARPT; TWR;
FACILITY IDENTIFIER : PIT; PIT;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/LESS SEVERE;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : NOT RESOLVED/INSUFFICIENT TIME; NOT RESOLVED/DETECTED AFTER-THE-FACT;
ANOMALY CONSEQUENCES : OTHER; NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : FLT WAS FROM RDU TO PIT, PREFLT AT RDU WAS NORMAL, ALL SYSTEMS CHKED GOOD. TKOF WAS ACCOMPLISHED AND AUTOPLT WAS ENGAGED AT 5000' MSL. AUTOPLT #2 WAS ENGAGED. ALL AIRSPD, ALTS, AND HDGS WERE INPUT VIA EITHER AUTOPLT CTL PANEL OR FLT MGMNT COMPUTER (FMC). FLT WAS UNEVENTFUL, AND SYSTEMS WORKED SATISFACTORILY. DSNT INTO PIT WAS VIA INPUTS TO FMC OR ACP. ACFT INTERCEPTED LOC 28R PIT AS CLRED BY ATC. ALL STATUS/ PROGRESS ANNUNCIATIONS TO PFD (PRIMARY FLT DISPLAY) INDICATED NORMAL SYSTEM OPS. AT APPROX 1250' AGL AUTOPLT #1 GANGED WITH AUTOPLT #2 AS REQUIRED FOR AUTOLAND AND A "LAND 2" ANNUNCIATION APPEARED INDICATING AUTOLAND CAPABILITY. ACFT TRACKED ILS NORMALLY. AT 150' RA I DISENGAGED AUTOPLT WITH CTL WHEEL DISCONNECT SWITCHES. AN AURAL CALVARY CHARGE, AND 2 SEP ANNUNCIATIONS INDICATED THE AUTOPLTS HAD DISCONNECTED. ACFT FLEW DOWN AND I BEGAN THE ROUND OUT FOR FLARE I NOTICED **RUDDER** MOVEMENT. AT FIRST I THOUGHT THAT THE CAPT WAS ASSISTING ON THE **RUDDERS** BUT AS I TOUCHED DOWN THE **RUDDER** MOVEMENT CONTINUED. AT THIS TIME I REALIZED THE AUTOPLT WAS STILL COMMANDING **RUDDER** MOVEMENT IN AN ATTEMPT TO MAINTAIN RWY CTRLINE. NO "ALIGN" OR "FLARE" OR "ROW OUT" ANNUNCIATIONS WERE DISPLAYED ON EITHER PFD TO INDICATE AUTOPLT WAS STILL ENGAGED. I ATTEMPTED TO DISCONNECT THE AUTOPLT USING THE AUTOPLT DISCONNECT BAR ON THE GLARESHIELD. BUT THIS "FOOL PROOF HARD" DISCONNECT DID NOT WORK EITHER. AS WE CLRED THE RWY **RUDDERS** CONTINUED TO MOVE IN AN ATTEMPT TO REGAIN LOC/RWY CTRLINE. I LATER FOUND OUT THAT THE **RUDDER** SERVO HAD AN ICE ACCUMULATION INTERNALLY WHEN PREVENTED THE SERVO FROM DISCONNECTING. THIS IS THE SEC SERVO (1 **RUDDER** MINE AND 1 ELEVATOR SERVO) THAT HAS FROZEN IN POS. KEEP AN EYE ON THIS TYPE ACFT GUYS'. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO. ACFT WAS GNDED AFTER THE INCIDENT FOR FURTHER CHK. MAINT FOUND **RUDDER** SERVO VENT HOLE WAS IN THE 1200 O'CLOCK POS VERSUS THE 0600 O'CLOCK. CORRECTION WAS MADE TO THE FLEET, COMPLETED IN 1/91, AND TO THIS DATE HAVE HAD NO FURTHER PROBS. THE **RUDDER** SERVO IS IDENTICAL TO THE UNIT USED ON THE ORIGINAL NON STRETCHED VERSION WITH THE VENT HOLE ADDED. THE ACFT IS CAPABLE OF AUTO LAND AND THE FLT CREW IS AUTH TO MAKE AUTO LAND BUT THE COMPANY USES CAT I MINIMUMS. THE AUTOPLT DISCONNECT WARNING WAS NORMAL EVEN THOUGH THE **RUDDER** SERVO WAS STILL CONNECTED. APPARENTLY THE DISCONNECT SENSES ONLY TWO SERVOS, ELEVATOR AND AILERON. RPTR CONFIRMED ALL INDICATIONS OF DISCONNECT OF THE AUTOPLT WERE

(REPORT CONTINUED)

NORMAL.

SYNOPSIS : FLT CREW OF MLG MADE AUTOLAND APCH AT 150 AGL DISCONNECTED AUTOPLTS BUT ONFLARE, TOUCHDOWN, TAXI, PLT FLYING FELT **RUDDER** MOVEMENT CAUSED BY AUTOPLT **RUDDER** CONTROL NOT DISCONNECTING AND ATTEMPTING TO STEER ACFT TO RWY CENTERLINE.

REFERENCE FACILITY ID : PIT
FACILITY STATE : PA
AGL ALTITUDE : 0,0
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : TAXI,APCH,LNDG;
SPECIAL ROUTE : ;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 179427
DATE OF OCCURRENCE : 9105
REPORTED BY : FLC; FLC; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO; ARTCC,RDR;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : HAR
FACILITY STATE : PA
FACILITY TYPE : ARTCC;
FACILITY IDENTIFIER : ZNY;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL; OTHER;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : NOT RESOLVED/UNABLE;
ANOMALY CONSEQUENCES : NONE;
NARRATIVE : SHORTLY AFTER LEVEL-OFF AT FL220, I ADVISED THE F/O THAT I WOULD BE GOING AFT TO USE THE REST FACS. UPON ARR TO THE LAV, I SENSED AN ABNORMAL YAW FROM THE ACFT AND IMMEDIATELY RETURNED TO MY COCKPIT SEAT. THE F/O WAS HAVING DIFFICULTY MAINTAINING STRAIGHT AND LEVEL FLT. I TOOK CTL OF THE ACFT AND DIAGNOSED THE PROB AS BEING ASSOCIATED WITH EITHER THE **RUDDER** AND/OR YAW DAMPER SYS. THE CHKLIST FOR ABNORMAL **RUDDER** CTL WAS COMPLETED, RESULTING IN A RETURN TO NORMAL ACFT CTL. SYS CTL WAS ADVISED AND THE F/A'S WERE BRIEFED TO STAY IN THEIR SEATS. PRIORITY HANDLING DIRECT TO PIT WAS REQUESTED FROM ATC. AN UNEVENTFUL LNDG IN PIT WAS ACCOMPLISHED USING MANUAL **RUDDER** PROCS. AN APPROPRIATE LOG BOOK ENTRY WAS MADE UPON ARR AT THE GATE.
SYNOPSIS : ACR AT CRUISE HAS CTL PROBLEM. MAKES PRECAUTIONARY LNDG.
REFERENCE FACILITY ID : HAR
FACILITY STATE : PA
DISTANCE & BEARING FROM REF. : 25,,SO
MSL ALTITUDE : 22000,22000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : NON;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CRS;
SPECIAL ROUTE : ;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 191153
DATE OF OCCURRENCE : 9110
REPORTED BY : FLC; ; ; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO; MISC,OTH; MISC, GNDCREW;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : OKC
FACILITY STATE : OK
FACILITY TYPE : ARPT; TWR;
FACILITY IDENTIFIER : OKC; OKC;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : LOSS OF ACFT CONTROL; ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : ACFT DAMAGED;
NARRATIVE : AT APPROX 100 FT AGL ON FINAL APCH ACFT YAWED ABRUPTLY TO L WITH L WING DROPPING. ACFT WAS REALIGNED WITH RWY AND A RATHER ABRUPT LNDG WAS MADE. DURING EXIT FROM RWY TO TAXIWAY GOING THROUGH APPROX 30 DEGS OF R TURN NOSE WHEEL STEERING WAS LOST. ACFT HAD EXPERIENCED A HYD FAILURE. ACFT WAS TOWED TO GATE WITHOUT FURTHER INCIDENT. MAINT FOUND THAT #1 GND SPOILER HYD ACTUATOR HAD COME APART (SEPARATED) FROM AIR FRAME AND WAS NO LONGER ATTACHED TO ACFT. ACTUATOR HYD CYLINDER HAD SEPARATED FROM FLANGE WHERE IT ATTACHES TO AIR FRAME OR FLT CTL SURFACE. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: CALLBACK CONVERSATION REVEALED THAT THE SURFACE WIND CONDITION WAS CALM WIND WITH TEMP IN LOW 60'S AND NOT A CONDITION TO CAUSE THE WING TO DROP. THE ACFT WAS ON TARGET SPD IN A NORMAL APCH ATTITUDE WHEN THE WING WENT DOWN AND THE ACFT YAWED L. THE RPTR SAID HE USED **RUDDER** TO ALIGN THE ACFT AND BRING THE WING UP AND THE LNDG THOUGH 'ABRUPT' WAS NOT HARD ENOUGH TO WRITE UP AS A HARD LNDG OR TO CAUSE THE TYPE OF HYD ACTUATOR FAILURE THAT WAS DISCOVERED. THERE WAS AN FAA INSPECTOR ON BOARD AT THE TIME BUT HE WAS NOT AN ACI. HE DID DISCUSS THE PROBLEM WITH THE FLC BUT THIS WAS BEFORE THE BROKEN ACTUATOR WAS DISCOVERED DURING POST-FLT INSPECTION. THE RPTR DOES NOT THINK HE WOULD HAVE BEEN ABLE TO MAKE A SUCCESSFUL GAR BECAUSE OF THE FLAP POS AND POSSIBLE CTL PROBLEMS. A COMPANY RPT WAS FILED BUT THERE HAS BEEN NO RESPONSE AT THIS TIME. THE HYD ACTUATOR CAME APART MUCH LIKE THE CAP COMES OFF A BALL POINT PEN. ONE END SEPARATED CAUSING THE FAILURE AND LOSS OF HYD FLUID FROM THE PRIMARY SYS.
SYNOPSIS : ACR MLG HAD CTL PROBLEM ON SHORT FINAL. AFTER LNDG DISCOVERED PRIMARY SYS HYD FAILURE CAUSED BY FAILURE OF SPOILER ACTUATOR.
REFERENCE FACILITY ID : OKC
FACILITY STATE : OK
AGL ALTITUDE : 0,0
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : NON;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : LNDG;
SPECIAL ROUTE : NON;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 213222
DATE OF OCCURRENCE : 9204
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,FO; FLC,PIC.CAPT; ARTCC,RDR;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : SFO
FACILITY STATE : CA
FACILITY TYPE : ARTCC; ARPT;
FACILITY IDENTIFIER : ZOA; SFO;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : LOSS OF ACFT CONTROL; ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC; COCKPIT/EQUIPMENT;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : OTHER;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : THE CAPT WAS HAND FLYING PRIOR TO LEVEL OFF, HE TRIMMED THE **RUDDER** THEN ENGAGED THE AUTOPLT. THE ACFT ENTERED INTO A SEVERE YAW AND THE AUTOPLT KICKED OFF. AFTER CHKING FOR AN ENG FAILURE, I LOOKED AT THE **RUDDER** TRIM. IT WAS MOVING TO THE FAR L. I QUICKLY **REVERSE**D THE TRIM TO CTR. I CANNOT SAY WHETHER THE TRIM KNOB CTRING MECHANISM FAILED (I TESTED THE CTRING MECHANISM MANY TIMES AFTER LNDG AND IT CTRED EVERY TIME), OR THE TRIM CONTINUED TO MOVE WITH A CTRED TRIM KNOB. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO. CLBING OUT OF SFO, THE CAPT WHO WAS NEW ON THE AIRPLANE, USED THE **RUDDER** TRIM JUST PRIOR TO ENGAGING THE AUTOPLT. WHEN ACFT YAWED, RPTR NOTICED 10 UNITS OF L **RUDDER** TRIM. HE GRABBED THE TRIM KNOB AND TURNED IT COMPLETELY TO THE R AND TRIM MOVED TO '0'. HE IS THEREFORE UNSURE IF, DURING THE TIME TRIM WAS RUNNING TO THE L, THE TRIM KNOB WAS IN THE L OR CTR ('0') POS. ACR PROPOSES A SQUIRT OF LUBRICANT ON THE KNOB AS A FIX.
SYNOPSIS : DURING CLB, **RUDDER** TRIM RUNS AWAY CAUSING SEVERE YAW.
REFERENCE FACILITY ID : SFO
FACILITY STATE : CA
MSL ALTITUDE : 23000,23000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CLB;
SPECIAL ROUTE : NON;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 219429
DATE OF OCCURRENCE : 9204
REPORTED BY : FLC; ;
PERSONS FUNCTIONS : FLC,FO; FLC,PIC.CAPT;
REFERENCE FACILITY ID : ZZZ
FACILITY STATE : US
FACILITY TYPE : ARPT;
FACILITY IDENTIFIER : ZZZ;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC; COCKPIT/EQUIPMENT;
ANOMALY RESOLUTION : NOT RESOLVED/ANOMALY ACCEPTED;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : ACFT EQUIPMENT; PROC OR POLICY/COMPANY; PROC OR POLICY/FAA;
NARRATIVE : DURING THE RIDDER TRIM PREFLT CHK, WE NOTICED THE TRIM POS ARROW HUNG UP. IT REMAINED AT '0' WHEN **RUDDER** TRIM WAS APPLIED. IT FINALLY 'JUMPED' TO 5 UNITS AND CONTINUED TO JUMP. WE DISCOVERED THIS COULD BE FLOWN IN ACCORDANCE WITH MEL. IN LIGHT OF **RUDDER** PROBLEM, I BELIEVE THIS MEL SHOULD BE REVIEWED. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO. THESE ACFT HAVE A HISTORY OF RUNAWAY **RUDDER** TRIM MOTORS. THE PROBLEM RPTED HERE MAKES THE MATTER WORSE, THE TRIM COULD BE RUNNING AWAY AND THE COCKPIT INDICATOR, AN ELECTRICALLY DRIVEN INST, WOULD NOT INDICATE ANY MOTION OF THE **RUDDER** TRIM IF IT JAMMED.
SYNOPSIS : **RUDDER** TRIM POS INDICATOR JAMMED AND OR STICKING AS **RUDDER** TRIM POS WAS CHANGED.
REFERENCE FACILITY ID : ZZZ
FACILITY STATE : US
AGL ALTITUDE : 0,0
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : PREFLT;
SPECIAL ROUTE : NON;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 258849
DATE OF OCCURRENCE : 9312
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO; TRACON,DC;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : LAX
FACILITY STATE : CA
FACILITY TYPE : TRACON; ARPT;
FACILITY IDENTIFIER : LAX; LAX;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : I WAS CAPT OF MLG NON STOP LAX-BWI. FO MADE THE TKOF. AT APPROX 1000 FT MSL, WHILE I WAS SWITCHING TO DEP CTL, I FELT THE ACFT YAW. AT FIRST I THOUGHT IT WAS WAKE TURB, THEN I CHKED THE ENG INSTS (NORMAL), THEN I CHKED THE **RUDDER** TRIM. I SAW THE **RUDDER** TRIM INDICATOR MOVING PAST 9 UNITS R TRIM. I GRABBED THE **RUDDER** TRIM CTL KNOB AND COMMANDED THE **RUDDER** BACK TO NEUTRAL. THE **RUDDER** RESPONDED AND WENT BACK TO NEUTRAL. THE FO HAND FLEW THE ACFT TO FL230 WHERE WE ENGAGED THE AUTOPLT AND PULLED THE **RUDDER** TRIM CTL CIRCUIT BREAKER. NO FURTHER PROBS WERE NOTED AND WE CONTINUED TO BWI AND WROTE UP THE **RUDDER** TRIM. OUR ACFT WAS AN ORIGINATOR IN LAX. I PERFORMED A **RUDDER** TRIM CHK PRIOR TO ENG START AND A FLT CTL CHK PRIOR TO TKOF. BOTH CHKS WERE NORMAL IN ALL RESPECTS. NO **RUDDER** TRIM KNOB STICKING WAS NOTED. NO **RUDDER** TRIM INPUTS WERE MADE BY EITHER PLT PRIOR TO THE TRIM RUNNING AWAY. I DO NOT BELIEVE THIS PROB WAS CAUSED BY A STICKING KNOB. I WONDER IF THIS IS IN ANY WAY RELATED TO THE LGA ACCIDENT. I KNOW MOST OF US FLYING THIS ACFT WOULD PREFER THE OLD MECHANICAL **RUDDER** TRIM SYS THAT IS ON THE MLG.
SYNOPSIS : AN MLG EXPERIENCES A RUNAWAY **RUDDER** TRIM DURING INITIAL CLB.
REFERENCE FACILITY ID : LAX
FACILITY STATE : CA
DISTANCE & BEARING FROM REF. : 1,,SW
MSL ALTITUDE : 1000,1000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : ICLB;
SPECIAL ROUTE : NON;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 262802
DATE OF OCCURRENCE : 9401
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO; ARTCC,RDR;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : BNA
FACILITY STATE : TN
FACILITY TYPE : ARTCC;
FACILITY IDENTIFIER : ZME;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC; COCKPIT/EQUIPMENT;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : NONE;
NARRATIVE : THE FO WAS FLYING THE ACFT ON AUTOPLT AT 37000 FT, WHEN HE INTRODUCED A SMALL AMOUNT OF R **RUDDER** TRIM. VERY SHORTLY, (3-4 SECONDS), THE ACFT STARTED A SMOOTH YAW TO THE L AND A ROLL TO THE R. BANK ANGLE APCHED 20 DEGS. THE AUTOPLT REMAINED ENGAGED UNTIL THE FO DISCONNECTED IT AND STARTED THE TRIM BACK TO THE L. THE TRIM REACHED AT LEAST 9 UNITS OF R TRIM BEFORE BEING RECTRED. THE ACFT WAS RETRIMMED AND AUTOPLT WAS RE-ENGAGED WITH NO FURTHER INCIDENT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR CALLED BACK TO STATE THAT THE ACFT WAS A B-737-400. THE FO HAD ONLY 'TWEAKED' THE **RUDDER** TRIM A BIT TO CTR THE BALL AND IT MIGHT BE SURMISED THAT THE TRIM SWITCH HAD SOME FORM OF INTERNAL PROB THAT ALLOWED THE **RUDDER** TRIM TO GO TO THE NEAR 9 DEGS POS AFTER THE SWITCH WAS RELEASED. THE ITEM WAS WRITTEN UP IN THE LOGBOOK BUT THE POST-FLT FINDINGS ARE NOT KNOWN.
SYNOPSIS : ACFT POS ROLL YAW A CONCERN UNTIL FO REALIZES THAT THE **RUDDER** TRIM WAS STILL ACTIVATED AFTER HAVING RELEASED THE **RUDDER** TRIM SWITCH.
REFERENCE FACILITY ID : BNA
FACILITY STATE : TN
MSL ALTITUDE : 37000,37000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CRS;
SPECIAL ROUTE : OTH;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 266812
DATE OF OCCURRENCE : 9403
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,PIC.CAPT; FLC,FO; TRACON,DC;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : YYZ
FACILITY STATE : ON
FACILITY TYPE : ARPT; ARTCC;
FACILITY IDENTIFIER : YYZ; YYZ;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : OUR 737-400 STARTED TO YAW L DURING CLB, RIGHT AFTER FINAL FLAP RETRACTION AND SETTING CLB PWR. MY INITIAL THOUGHT WAS THAT WE'D LOST AN ENG. A SCAN OF THE ENG INSTS SHOWED NO PROBS, SO I ASKED THE FO TO CHK THE **RUDDER** TRIM INDICATOR, BECAUSE I WAS OCCUPIED HAND FLYING WITH THE TRIM PROB. THE FO FOUND THE **RUDDER** TRIM POS INDICATOR MOVING SLOWLY TO THE L, AND PASSING 11 UNITS. HE PROMPTLY APPLIED RIGHT TRIM WITH THE TRIM KNOB UNTIL THE INDICATOR SHOWED 0 OR THE CTRED POS. NO FURTHER UNCOMMANDED **RUDDER** TRIM MOVEMENT WAS SEEN FOR THE REMAINDER OF THE FLT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR CALLED BACK AND STATED THAT THE **RUDDER** TRIM WAS NOT TOUCHED BY ANY CREW MEMBER PRIOR TO ITS 'RUNNING ON ITS OWN.' THIS WAS THE SAME TYPE ACFT THAT EXPERIENCED THE SIMILAR INCIDENT OF RUNNING ON IT'S OWN BUT THE OTHER INCIDENT OCCURRED AFTER THE FO HAD INITIATED SOME INPUT INTO THE TRIM SWITCH AND THEN RELEASED IT. SAME ACR BUT DIFFERENT ACFT ID. OTHER ACN WAS 262802.
SYNOPSIS : ACFT POS ROLL YAW INTERPRETED AS POSSIBLE ENG FAILURE IN CLB UNTIL PIC AND FO REALIZE THAT THE **RUDDER** TRIM WAS TRIMMING TO THE L ON AN UNCOMMANDED ACTION.
REFERENCE FACILITY ID : YYZ
FACILITY STATE : ON
DISTANCE & BEARING FROM REF. : 5,,SW
AGL ALTITUDE : 2000,2000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CLB;
SPECIAL ROUTE : OTH;
AIRCRAFT HANDLE : A1;

ACCESSION NUMBER : 267516
DATE OF OCCURRENCE : 9403
REPORTED BY : FLC; ; ;
PERSONS FUNCTIONS : FLC,FO; FLC,PIC.CAPT; TRACON,DC;
FLIGHT CONDITIONS : VMC
REFERENCE FACILITY ID : YYZ
FACILITY STATE : ON
FACILITY TYPE : ARPT; TRACON;
FACILITY IDENTIFIER : YYZ; YYZ;
AIRCRAFT TYPE : MLG;
ANOMALY DESCRIPTIONS : ACFT EQUIPMENT PROBLEM/CRITICAL; OTHER;
ANOMALY DETECTOR : COCKPIT/FLC;
ANOMALY RESOLUTION : FLC OVERCAME EQUIP PROBLEM;
ANOMALY CONSEQUENCES : NONE;
SITUATION REPORT SUBJECTS : AN ACFT TYPE; ACFT EQUIPMENT;
NARRATIVE : ENRTE FROM YYZ TO PHL WHILE I WAS EXECUTING THE PNF DUTIES AND COMMUNICATING WITH ATC. CAPT CALLED FOR ME TO CHK THE **RUDDER** TRIM. WHEN I LOOKED THE TRIM INDICATOR APPEARED TO BE MOVING BTWN 10 AND 11 UNITS L. I BEGAN TO MOVE THE INDICATOR BACK TO CTR AFTER STATING TO CAPT THE POS INDICATED. HE STATED HE THOUGHT WE MIGHT HAD BEEN HAVING AN ENG FAILURE DUE TO YAW, HE STARTED TO FUEL. BUT ALL ENG INDICATORS WERE **RUDDER** TRIM. THE FLT WAS CONTINUED UNEVENTFULLY WITH NO OTHER OCCURRENCE OF UNCOMMANDED **RUDDER** TRIM NOTED. WE LANDED IN PHL. CAPT THEN MADE REQUIRED LOG BOOK WRITE UP.
SYNOPSIS : RWY **RUDDER** TRIM.
REFERENCE FACILITY ID : YYZ
FACILITY STATE : ON
DISTANCE & BEARING FROM REF. : 10,,SW
MSL ALTITUDE : 8000,12000
AIRCRAFT INVOLVEMENT : ANOMALY;
AIRCRAFT TYPE : MLG;
CREW SIZE : 2;
WINGS, GEAR, SURFACE, ENGINE : LOW,RETRACT,LAND,TURBOJET;
NUMBER OF ENGINES : 2;
ADVANCED COCKPIT : DISPLAY,NAVCTL;
OPERATOR ORGANIZATION : ACR;
OPERATION : PAX;
FLIGHT PLAN TYPE : IFR;
FLIGHT PHASE : CLB;
SPECIAL ROUTE : OTH;
AIRCRAFT HANDLE : A1;