Factual Report – Attachment 24 ASRS Request SR7290

OPERATIONAL FACTORS

DCA19MA086

Search Request No. 7290

Inadvertent Activation of Go-Around Mode Related Incidents

June 6, 2019





Ames Research Center Moffett Field, CA 94035-1000



TH: 262-7

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 when evaluating these data of the following points.

ASRS reports are submitted voluntarily. Such incidents are independently submitted and are not corroborated by NASA, the FAA or NTSB. 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 Airspace System.

Information contained in reports submitted to ASRS may be clarified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information represents the perspective of the specific individual who is describing their experience and perception of a safety related event.

After preliminary processing, all ASRS reports are de-identified and the identity of the individual who submitted the report is permanently eliminated. All ASRS report processing systems are designed to protect identifying information submitted by reporters; including names, company affiliations, and specific times of incident occurrence. After a report has been de-identified, any verification of information submitted to ASRS would be limited.

The National Aeronautics and Space Administration and its ASRS current contractor, Booz Allen Hamilton, 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.

Becky L. Hooey, Director NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

Certain caveats apply to the use of ASRS 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 that occur, or it may be just a small fraction of total occurrences.

Moreover, not all pilots, controllers, mechanics, flight attendants, dispatchers or other participants in the aviation system are equally aware of the ASRS or may be equally willing to report. Thus, the data can reflect **reporting biases**. These biases, which are not fully known or measurable, may influence ASRS information. 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 aware of the ASRS program and more inclined to report should an NMAC occur. Any type of subjective, voluntary reporting will have these limitations related to quantitative statistical analysis.

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the **real power** of ASRS data is the **qualitative information** contained in **report narratives**. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, **why** it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.



ACN: 1453731 (1 of 11)

Synopsis

An air carrier Captain reported the First Officer mistakenly pushed the TOGA button on short final while attempting to disconnect the autopilot. A go around was required because of the resultant unstablized approach.

ACN: 1319659 (2 of 11)

Synopsis

B747 flight crew reported receiving a stick shaker when they lost situational awareness while dealing with the inadvertent selection of TOGA mode while on approach.

ACN: 1259842 (3 of 11)

Synopsis

A B-777 aircrew were flying an unstabilized approach when the jumpseater commanded a go-around. The Captain was confused and slow to respond and may have inadvertently hit the TO/GA button, causing the aircraft to climb through the 3000 foot level off altitude.

ACN: 1243796 (4 of 11)

Synopsis

B737-800 Captain reported he accidentally hit the TOGA button on an ILS approach and chose to go-around. Other errors were made during the next approach before he and the First Officer regained full situational awareness.

ACN: 1209425 (5 of 11)

Synopsis

EMB-170 Captain reports being issued 3 different arrival procedures and multiple turns off course during arrival to DEN. Then, while on a heading, the crew was given holding instructions. The hold goes fine but later in the arrival the TOGA button is inadvertently pushed while attempting to slow and descend for the next fix, resulting in a high and fast crossing.

ACN: 1186810 (6 of 11)

Synopsis

An ERJ-190 flight crew, anticipating a VOR Runway 4 at LGA per the ATIS, was cleared instead for a visual by approach control but opted to utilize the constraints of the IAP as a backup. Because the IF, QATAR (crossing altitude 3,000), was not included in their nav database they descended prematurely toward the FAF (crossing altitude 1,700) and, when the Captain became concerned they were too low and attempted to climb he activated TOGA which created momentary chaos while they re-established an appropriate flight path by turning off the autoflight. A safe approach and landing resulted.

ACN: 1129035 (7 of 11)

Synopsis

B737-800 Captain reports an inadvertent TOGA selection by the flying First Officer, approaching minimums, followed quickly by deselecting autopilot and autothrust. The approach is continued to landing in marginal VMC with some glideslope excursions and the flight director indicating go-around.

ACN: 1001517 (8 of 11)

Synopsis

A320 First Officer reports inadvertent selection of TOGA thrust during a planned flex thrust takeoff and the problems encountered at thrust reduction/clean up altitude. Thrust levers are retarded one detent to get into the auto flight climb mode then advanced one detent to maintain MCT (actually TOGA), putting auto flight into go around mode. A flap overspeed occurs due to windshear and the high thrust setting.

ACN: 780186 (9 of 11)

Synopsis

CARJ FO INADVERTENTLY ENGAGES TOGA DURING DESCENT. ALTDEV RESULTS.

ACN: 551538 (10 of 11)

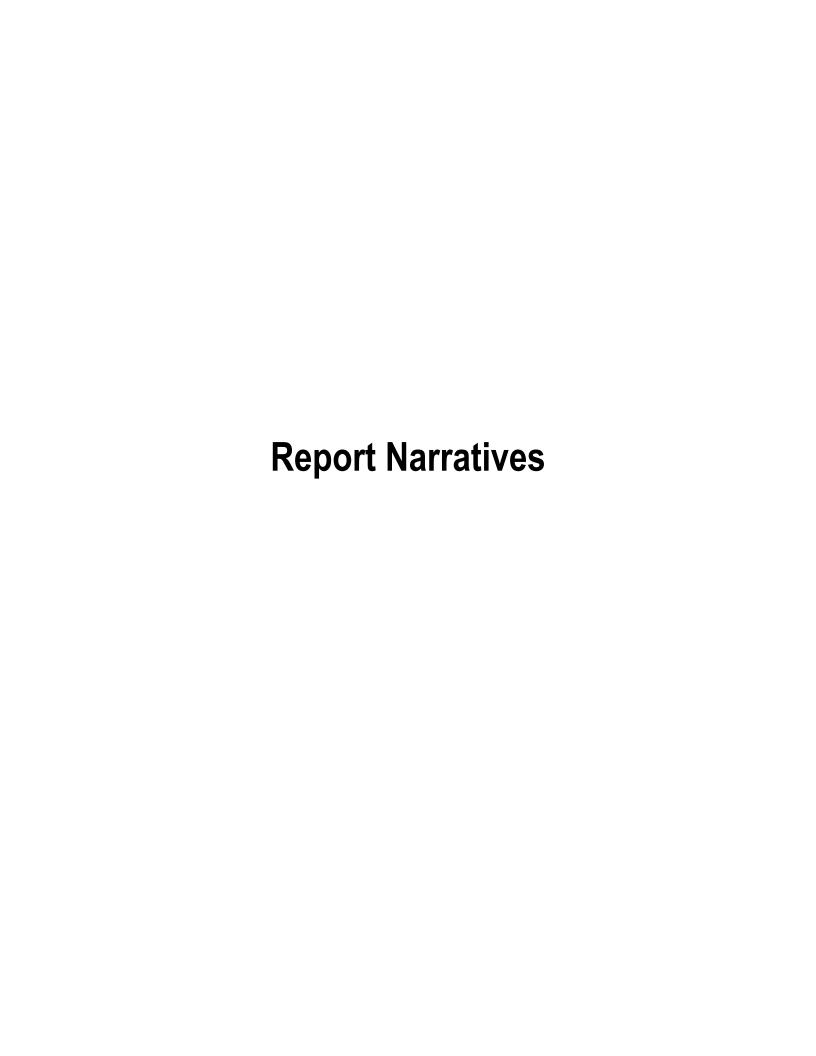
Synopsis

INADVERTENT ACTIVATION OF TOGA DURING LNDG ROLL ON A B777 AT THE END OF A LONG INTL FLT.

ACN: 163472 (11 of 11)

Synopsis

INADVERTENT GO AROUND MODE ACTIVATION ON ADVTECH CPR MLG LEADS TO ALT EXCURSION.



Time / Day

Date: 201706

Local Time Of Day: 0601-1200

Place

Locale Reference.ATC Facility: VHHH.Tower

State Reference: FO

Altitude.MSL.Single Value: 300

Environment

Flight Conditions: VMC

Light: Daylight

Aircraft

Reference: X

ATC / Advisory.Tower : VHHH Aircraft Operator : Air Carrier

Make Model Name: Heavy Transport Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR

Mission: Cargo / Freight Flight Phase: Initial Approach

Component

Aircraft Component: Autopilot

Aircraft Reference : X

Problem: Improperly Operated

Person

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1453731

Human Factors: Training / Qualification

Human Factors: Workload Human Factors: Confusion Human Factors: Distraction

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter: Unstabilized Approach

Detector.Person: Flight Crew When Detected: In-flight

Result.Flight Crew: Took Evasive Action

Result.Flight Crew: Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem: Procedure

Narrative: 1

During approach runway 25L HKG, day VMC, FO (First Officer) was the flying pilot, at about 300 ft he announced: autopilot off auto throttles off, he disconnected the autothrottles with one click which triggered the beeper and master caution, I immediately reset the master caution to silence the beeper; next, the aircraft was pitching up and climbing and the thrust increasing followed by the master warning and siren due to the auto pilot disconnecting, seeing that we were no longer on a stable approach and not in a position to land safely, I called "go around", and the go around was initiated, ATC was advised and the autopilot re-engaged; we carried on the missed approach as published. ATC queried about the reason for the Go around and we informed them that it was due to an unstable approach on short final.

During the go around, when the autopilot was re-engaged, I mistakenly selected the left autopilot; now level at 6000 ft on a long downwind portion of the missed approach, still trying to figure out what exactly happened that caused the go around, I asked the FO to disconnect the autopilot so I can engage the right autopilot, and I noticed that he was pushing the TOGA (Take Off Go Around) switches to disconnect the autopilot! It became apparent what happened at 300 ft, he disconnected the autothrottles but mistook the yoke autopilot disconnect switch with the TOGA switches and he pushed the TOGA switches instead, which advanced the thrust levers and initiated an autopilot coupled go around, not realizing why the airplane was pitching up, he overpowered the autopilot by applying forward pressure on the yoke to stop it from pitching up thus disengaging the autopilot and causing the master warning and the siren to go off!

After a brief discussion going over what went wrong to avoid repeating the same scenario, ATC vectored us for another approach and the FO flew a stable approach, disconnected the autopilot and autothrottles properly and we landed safely on Runway 25L.

Synopsis

An air carrier Captain reported the First Officer mistakenly pushed the TOGA button on short final while attempting to disconnect the autopilot. A go around was required because of the resultant unstablized approach.

Time / Day

Date: 201512

Local Time Of Day: 0001-0600

Place

Locale Reference.Airport: ZZZ.Airport

State Reference: US

Altitude. MSL. Single Value: 3000

Environment

Flight Conditions: Mixed

Weather Elements / Visibility. Visibility: 10

Light: Night

Ceiling.Single Value: 2000

Aircraft

Reference: X

ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B747-400
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission : Cargo / Freight Flight Phase : Initial Approach

Route In Use: Vectors Airspace.Class E: ZZZ

Component

Aircraft Component: Autoflight System

Aircraft Reference: X

Problem: Improperly Operated

Person: 1

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: First Officer Function.Flight Crew: Pilot Flying

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience.Flight Crew.Total: 9000
Experience.Flight Crew.Last 90 Days: 160

Experience.Flight Crew.Type: 3000

ASRS Report Number. Accession Number: 1319659

Human Factors: Situational Awareness

Person: 2

Reference: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience.Flight Crew.Total: 23500 Experience.Flight Crew.Last 90 Days: 211

Experience.Flight Crew.Type: 990

ASRS Report Number. Accession Number: 1319660

Human Factors: Situational Awareness

Events

Anomaly.Deviation - Speed : All Types

Anomaly. Deviation - Procedural: Published Material / Policy

Detector.Person: Flight Crew When Detected: In-flight

Result.Flight Crew: Became Reoriented

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem: Human Factors

Narrative: 1

We were on a 25 mile downwind. We were at 170 KIAS, flaps 20, gear up, descending through 4000 feet for 3000 feet. We were given a turn to 090 for base leg. During the turn and descent, PF must have inadvertently hit the TOGA switches on the throttles. Airplane went into a 10-12 degree nose up attitude with Go-Around thrust. PF and PM announced the TOGA status, and PF attempted to disengage both autopilot and autothrottles. Autopilot disengaged normally, and PF pushed over as airplane reached ~4200 feet. Autothrottles did not disengage, so PF manually held them in idle in an attempt to control airspeed. PF announced "autothrottles will not disengage", so PM turned off the autothrottle switch on the MCP. As PF tried to level the aircraft at 3000 feet (at this time the aircraft had descended to ~2900 feet), the airspeed slowed to ~156 KIAS (the top of the yellow band) and the crew got a brief stick shaker. PF immediately recovered by advancing the throttles to full power, rolled wings level and climbing back to 3000 feet. Automation was restored, ATC cleared the crew for the approach approximately 25 miles from the field, and the rest of the flight continued uneventfully.

Narrative: 2

Aircraft did what it was commanded by FMC and automation modes engaged, but not what the crew was cleared to do or what crew wanted. Being heavy, configured, low and slow complicated crew communications as aircraft took time to recover pitch and power/speed. When PF called for A/T ON, I should have selected either ALT HLD or FLCH instead of VNAV (which had been our previously selected mode), which gave us bad F/D commands and a much higher commanded speed initially. PF did a good job of recovery hand flying aircraft when split automation did not do what was expected. Lesson learned: Don't hit TO/GA switches unless needed.

Synopsis

B747 flight crew reported receiving a stick shaker when they lost situational awareness while dealing with the inadvertent selection of TOGA mode while on approach.

Time / Day

Date: 201505

Local Time Of Day: 0001-0600

Place

Locale Reference.Airport: ZZZ.Airport

State Reference: US

Environment

Flight Conditions: Marginal

Aircraft

Reference: X

Aircraft Operator: Air Carrier

Make Model Name: B777 Undifferentiated or Other Model

Crew Size.Number Of Crew: 3 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger

Flight Phase: Final Approach

Airspace.Class B: ZZZ

Person: 1

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: First Officer Function.Flight Crew: Pilot Not Flying

ASRS Report Number. Accession Number: 1259842

Human Factors: Communication Breakdown

Human Factors: Confusion

Human Factors: Human-Machine Interface Communication Breakdown.Party1: Flight Crew Communication Breakdown.Party2: Flight Crew

Analyst Callback: Completed

Person: 2

Reference: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1260280

Human Factors: Communication Breakdown

Human Factors: Confusion

Human Factors: Human-Machine Interface

Communication Breakdown.Party1: Flight Crew Communication Breakdown.Party2: Flight Crew

Person: 3

Reference: 3

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: First Officer Function.Flight Crew: Pilot Not Flying Function.Flight Crew: Relief Pilot

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1261732

Human Factors: Communication Breakdown

Human Factors: Confusion

Human Factors: Human-Machine Interface Communication Breakdown.Party1: Flight Crew Communication Breakdown.Party2: Flight Crew

Events

Anomaly. Deviation - Altitude : Overshoot

Anomaly. Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Speed : All Types Anomaly.Deviation - Procedural : Clearance

Anomaly.Deviation - Procedural : Published Material / Policy Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person: Flight Crew When Detected: In-flight

Result.Flight Crew: Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem: Human Factors

Narrative: 1

On approach ILS XXR, Captain was flying the approach. While on autopilot, Captain was attempting to acquire the glide slope from above. Captain had been briefed--twice--by the First Officer (FO) on using the VSI to descend between 1000-1500fpm. Captain elected to configure and use speed brakes. Captain called for Flaps 25/30 with speed brakes extended. FO called for speed brakes to be retracted first.

Upon speed brake retraction, aircraft pitched up. Aircraft then began a climbing left turn on the autopilot. Captain became confused as to why the aircraft was climbing and turning and attempted to override the controls. Relief Officer (FB) called "Go Around".

Captain was slow to initiate go around procedures. Aircraft got 10+knots SLOW and SLOWING while trying to follow the Flight Director Command bars. FO directed Captain to lower the nose as we were getting excessively slow (while in the climb). Captain accelerated and called for Flaps up (from flap position 20/25) and FB called for gear up. Aircraft climbed to 3400+ft (cleared altitude was 3000ft) and accelerated to 270+knots.

Captain later admitted his finger had hit the TO/GA button causing the aircraft to go around on autopilot. I now am unsure if we oversped the flaps, because maintaining aircraft control was priority. I do not know if the Captain put a writeup for possible flap overspeed into the maintenance log. Second approach and landing were uneventful.

Callback: 1

Asked about the altitude where these events occurred. He said it was about 2500 feet. He also said there was no problem with the aircraft and that the retraction of the speed brakes was the reason for the nose to pitch up.

Narrative: 2

We were proceeding toward ZZZ for the ILS to 8R. The sun wasn't out yet and I was caught high on the approach. I mentioned that I didn't think we would be able to get down enough to have a stable approach but we continued. (1st sign of bad judgement on my part). We were barely within the parameters of gear down and flaps 20 at 2000 ft. I was able to get us configured by 1500 ft., but we were still high on the approach by at least a dot and a half (or so). Here it comes. So, in an effort to save the approach, I extended the speed brakes and that was my biggest mistake. Go around was initiated at 1500 ft. (or so) and because the plane was turning left and we need to go straight, I disconnected the auto pilot, adding to my workload. Things were happening fast and I exceed my climb clearance by about 320 ft. after that everything slowed back down to normal and a normal approach and landing was made. As a side note, FB was awesome.

OK, this is the part of what I learned. 1) Don't try to save a bad approach. We were caught high and I should have acted more conservatively sooner. 2) No speed brakes past 5 degrees per SOP. 3) Brief go around procedures along with approach briefing. (i.e., flaps gear and FD procedures to remove and auto pilot off temptations). Use vertical speed to catch glide slope per SOP. 4) Always keep in mind that it's been a long night regardless of how I think I feel. Pay particular attention to every step of every procedure and clearance and recognize my limited experience on this aircraft.

Narrative: 3

Approach control record us to final. I was the FB and in the jump seat. It appeared to me that it was too close a turn to final given our altitude and the weather. We were cleared for the approach in the captain who was flying attempted to slow and descend. The first officer commented as well as the captain that this was going to be difficult. At approx. 1500 feet (approx.) I called "go-around". The aircraft began in immediate turn to the left which I believe was due to the fact that in this airplane LNAV will automatically engage when the toga buttons are pressed. In any case I captain disconnected the autopilot and flew the visual missed approach. Shortly thereafter we had an airspeed exceedance of 275K and an altitude deviation of 300 ft. approx. ATC did not comment on this however. The second approach and landing was uneventful.

Advise ATC that you need a better vector when needed.

Synopsis

A B-777 aircrew were flying an unstabilized approach when the jumpseater commanded a go-around. The Captain was confused and slow to respond and may have inadvertently hit the TO/GA button, causing the aircraft to climb through the 3000 foot level off altitude.

Time / Day

Date: 201503

Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: DCA.Airport

State Reference : DC

Altitude.AGL.Single Value: 1000

Environment

Flight Conditions : IMC Ceiling.Single Value : 300

Aircraft

Reference: X

ATC / Advisory.Tower : DCA ATC / Advisory.TRACON : PCT Aircraft Operator : Air Carrier Make Model Name : B737-800 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121

Flight Plan : IFR Mission : Passenger Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS: Runway 1

Nav In Use.VOR / VORTAC : DCA Flight Phase : Initial Approach

Airspace.Class B: DCA

Component

Aircraft Component: FMS/FMC

Aircraft Reference : X

Problem: Improperly Operated

Person

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1243796

Human Factors: Situational Awareness

Human Factors : Workload Human Factors : Confusion

Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly. Deviation - Procedural: Clearance

Detector.Person: Flight Crew When Detected: In-flight

Result.Flight Crew: Executed Go Around / Missed Approach

Result.Flight Crew: Became Reoriented

Result.Air Traffic Control: Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

On approach to DCA Runway 1 ILS, we were tracking the LOC/Glideslope (GS). At approximately 1000 feet AGL I disconnected Autopilot/Auto-throttles (or so I thought) to continue the approach hand flying using the HUD. The Flight Director went into Go-Around mode. We spent about a second or two trying to recover the flight director ILS mode and then I made the decision to miss the approach. (We were IMC and the ceiling was about 300 feet)

We advised Tower that we were going around. Tower cleared us to track outbound on the 325 degree radial of DCA VOR and maintain 2000 feet. At that time I set the Course Selector to 325 (also the published miss) and continued inbound while climbing to 2000 feet (we were still about a mile or two out). Tower switched us over to Departure Control, who then cleared us to turn left to heading 270 and maintain 3000 feet.

Approach kept us in a very close-in box pattern and gave us a turn to base at 2000 feet. On base leg I noted that we had a thirty knot tailwind and I felt we were going to be late on the turn to intercept. I reached up and increased the bank angle from 25 to 30 degrees. They gave us the intercept turn as the LOC came "Alive" and we did in fact fly through the localizer. The aircraft (autopilot) flew through the LOC course to the east and then corrected back with a new intercept from the east side. As the CDI began to center the aircraft (autopilot) continued to drift west of the LOC course. We advised Approach that we were unable to intercept the Localizer and they vectored back again for another intercept, but further out. (In my mind) I blamed the fact that we were unable to intercept on the late turn and the 30 knots of crosswind at 2000 feet. But as they vectored us and we completed our checks, I realized that I had never reset the CDI Course back to 006, the inbound course of the Localizer. It was set on the missed approach course of 325.

During the "new" downwind we were able to properly setup the approach and land without further incident.

Prior to the first approach, we were well setup and well briefed. Had the TOGA button not been activated, it would have been a nice approach and landing without incident.

However, why did I hit the TOGA button? Either I hit it by mistake, or my finger hit it when my hand tensed up as my thumb pushed the throttle disconnect, I don't know. But when it went into "Go-Around", the Auto-throttles were disconnected. Not sure what happened. We tried to salvage the approach (reset the automation), but after a second or

two, I felt that the safest thing to do was miss the approach and come back around and do it again. Having not discussed or briefed it, I didn't want to shut all the automation off and fly a raw data approach down to a 300 ft ceiling. I felt that that was a "Sucker Hole" in the "Swiss Cheese".

Tower cleared us to track outbound on the 325 degree radial of DCA VOR (the published missed approach). Even though I was navigating with LNAV on the miss, I reset my Course Selector to 325 as one more backstop to turn before the prohibited area, along with the Heading Bug which we had set to 325 when we intercepted the Localizer course. We had briefed this in the approach briefing.

The Controllers in the DC area do an excellent job and they move a lot of traffic, and I would bet that the controller thought that he was doing us a favor, getting us quickly and efficiently back to the ILS, but he had no idea how busy we were, nor did we tell him. I never did a proper setup and re-brief of the approach. I should not have accepted the turn to base when we were not ready for the approach.

Once on base leg, I had a feeling that something was not quite right, but I wrote it off to the very close turn and very short base leg and the winds blowing toward the localizer. I also blamed the fact that we were unable to re-capture the Localizer after we had flown through it, on the late turn to intercept... But, had my Course Selector been set, the aircraft (autopilot) would have recovered in time for GS intercept.

If we had had a longer downwind and a longer base leg we would have had more time to setup and re-brief the approach, not to mention the fact that a longer base would have likely given me the situational awareness to figure out what was "not quite right" if somehow I had missed it in the setup and re-brief.

One other thing we found very distracting was being asked several times "Why are you going around?" while we were in the miss. We told them to standby, but it was still very distracting.

I pride myself with being expeditious without being rushed, but in this case I was not only rushed, but I allowed my FO (the pilot monitoring) to be rushed as well. He did an excellent job, but he was heads down most of the time, reprograming the FMS and making radio calls.

Synopsis

B737-800 Captain reported he accidentally hit the TOGA button on an ILS approach and chose to go-around. Other errors were made during the next approach before he and the First Officer regained full situational awareness.

Time / Day

Date: 201410

Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: DEN.Airport

State Reference: CO

Altitude.MSL.Single Value: 24700

Environment

Flight Conditions: IMC

Weather Elements / Visibility : Turbulence Weather Elements / Visibility : Icing

Aircraft

Reference: X

ATC / Advisory.Center : ZDV ATC / Advisory.TRACON : D01 Aircraft Operator : Air Carrier

Make Model Name: EMB ERJ 170/175 ER/LR

Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Nav In Use : FMS Or FMC Flight Phase : Descent

Route In Use.STAR: ANCHR2

Airspace.Class A: ZDV

Person

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying

Function.Flight Crew: Captain

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1209425

Human Factors: Situational Awareness

Human Factors: Workload

Events

Anomaly. Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Altitude : Undershoot Anomaly.Deviation - Speed : All Types

Anomaly. Deviation - Procedural: Published Material / Policy

Anomaly. Deviation - Procedural: Clearance

Detector.Person: Flight Crew

When Detected: In-flight

Result.General: None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem: Human Factors

Narrative: 1

Speed and altitude deviation on the ANCHR2 arrival on the arrival phase into DEN the flight was task saturated due to atc. Atc had given us 3 different arrival procedures and multiple turns off course. While on a heading and abeam LIBIE we were given hold at LIBIE at FL230 and expedite down to 230. We were at about fl270. We were about 4 miles from LIBIE and we needed to make a 90 degree turn to get there so we entered the hold manually and set up the fms once we were far enough away it would accept it. No problems there. Later, after released from the hold we were about 3 from HIGUN and I reminded my fo about the speed restriction of 210 at HIGUN, he was still in manual speed mode from using it in the hold. He then went full speed brakes to slow down and I don't think he was in fms speeds yet because the aircraft got slow. He said he must have hit the toga button when he was going for the speed brakes. The plane went into go around mode and started to climb. I shut the speed brakes and told him to watch his speed and altitude. I then took over the controls and got the speed and altitude back and set up the automation for him and gave him back the controls. I believe we got about 50 knots too fast and between 700 and 1700 feet high. Soon after that we were on the localizer for 17r and the fms still had the arrival starting at ANCHR 3 times. We entered icing conditions. I tried to clean up the flight plan in the fms and it wouldn't let me. I also needed to enter ice speeds and did so, meanwhile the fo (pilot flying) did not start the descent on the localizer so atc turned us off the loc and re sequenced us. I believe we were still about 15 miles out at that time.

I believe the fo got very flustered after the hold instructions even though the hold went fine. I think that led to an over reaction to the speed assignment at HIGUN. I could have taken the controls sooner and maybe there would have been no deviation. I was trying to talk him through the recovery but he didn't respond. I don't really have a good solution. I believe being comfortable with manual mode and not relying so much on the fms is important. The fo didn't seem to have much situational awareness apart from the fms.

Synopsis

EMB-170 Captain reports being issued 3 different arrival procedures and multiple turns off course during arrival to DEN. Then, while on a heading, the crew was given holding instructions. The hold goes fine but later in the arrival the TOGA button is inadvertently pushed while attempting to slow and descend for the next fix, resulting in a high and fast crossing.

Time / Day

Date: 201407

Local Time Of Day: 1801-2400

Place

Locale Reference.Airport: LGA.Airport

State Reference: NY

Altitude. MSL. Single Value: 2000

Environment

Flight Conditions: VMC

Light: Daylight

Aircraft

Reference: X

ATC / Advisory.TRACON: N90 Aircraft Operator: Air Carrier

Make Model Name: EMB ERJ 190/195 ER/LR

Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Nav In Use : FMS Or FMC

Nav In Use.VOR / VORTAC : LGA Flight Phase : Initial Approach

Component: 1

Aircraft Component : Autoflight System

Aircraft Reference: X

Problem: Improperly Operated

Component: 2

Aircraft Component: Navigation Database

Problem: Design

Person

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: First Officer Function.Flight Crew: Pilot Not Flying

ASRS Report Number. Accession Number: 1186810

Human Factors: Training / Qualification

Human Factors : Confusion Human Factors : Distraction

Human Factors: Human-Machine Interface

Human Factors : Workload Analyst Callback : Attempted

Events

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.ATC Issue: All Types

Anomaly. Deviation - Speed: All Types

Anomaly. Deviation - Procedural : Published Material / Policy

Anomaly. Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter: Unstabilized Approach

Detector.Person: Air Traffic Control

Detector.Person: Flight Crew

Were Passengers Involved In Event: N

When Detected: In-flight

Result.Flight Crew: FLC Overrode Automation

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Chart Or Publication Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Manuals Contributing Factors / Situations : Procedure

Primary Problem: Human Factors

Narrative: 1

The Captain was the pilot flying. I was the pilot monitoring. The ATIS for LGA had listed the VOR 4 approach in use for Runway 4. We set up for the VOR 4 LGA and accomplished all applicable checklists to set up for the approach. Outside QATAR, LGA Approach cleared us for the visual approach to Runway 4 and to keep speed up to 180 knots until 5 NM final. Once cleared for the approach, the Captain set up the autopilot (AP)/flight director (FD) to fly the VOR 4 approach. As specified in the QRH, the Captain dialed the altitude to the FAF [NORAY] altitude of 1,700 feet. However, he did this outside of QATAR which was listed as an intermediate fix (IF). QATAR was not published in the FMS nor was the 3,000 foot altitude restriction prior to crossing OATAR.

Once he activated the approach on the guidance panel, the airplane started descending below 3,000 feet prior to QATAR. The Captain was concerned that we were getting too low and expressed his intent to level off and possibly climb until we got closer to NORAY.

He then attempted to level off but was unsuccessful. He ended up pressing the TOGA button and the airplane started a climb with full power. He then disconnected the autopilot and the autothrottles. At this point, I tried to assist him in trying to re-engage the approach mode so we could get back on profile. We were both task saturated at this point. He was hand flying the plane with no automation and I was trying to help him figure out how to get the airplane back onto profile with the FD. GA/Track was displayed on the FMA. At this point our speed had decreased down to approximately 150-160 knots. Approach called us and said we needed to be at 180 knots until 5 DME. We then increased our speed to comply. The Captain ended up flying a visual approach with the AP and FD off. We had an uneventful landing.

Simply put, both the Captain and I were task saturated. Although the Captain was utilizing the flight guidance panel in accordance with QRH procedures for a VOR approach, we

thought the airplane was descending too low too early because the altitude restriction of 3,000 feet prior to QATAR was not part of the approach in the FMS. After the TOGA button was pressed we both got behind the airplane and then ATC requested [a] speed restriction of 180 knots [that] was not complied with.

I think part of issue was that QATAR was not part of the VOR approach built in the FMS. If it was, then the airplane would have leveled off at 3,000 feet as published on the approach plate. In this scenario, he shouldn't have dialed in the FAF altitude but should have dialed in the 3,000 feet altitude instead. I also think more training on the TOGA button and what it does would be beneficial. We don't really execute go-arounds on the line except on rare occasions so I don't think many pilots are entirely comfortable with it.

Synopsis

An ERJ-190 flight crew, anticipating a VOR Runway 4 at LGA per the ATIS, was cleared instead for a visual by approach control but opted to utilize the constraints of the IAP as a backup. Because the IF, QATAR (crossing altitude 3,000), was not included in their nav database they descended prematurely toward the FAF (crossing altitude 1,700) and, when the Captain became concerned they were too low and attempted to climb he activated TOGA which created momentary chaos while they re-established an appropriate flight path by turning off the autoflight. A safe approach and landing resulted.

Time / Day

Date: 201311

Local Time Of Day: 1801-2400

Place

Locale Reference.Airport: DEN.Airport

State Reference: CO

Relative Position. Distance. Nautical Miles: 1

Altitude. AGL. Single Value: 400

Environment

Flight Conditions: IMC

Weather Elements / Visibility. Visibility: 2

Light: Night

Ceiling.Single Value: 300

Aircraft

Reference: X

ATC / Advisory.Tower : DEN Aircraft Operator : Air Carrier Make Model Name : B737-800 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121

Flight Plan : IFR Mission : Passenger

Flight Phase: Initial Approach

Airspace.Class B: DEN

Component

Aircraft Component: Autoflight System

Aircraft Reference: X

Problem: Improperly Operated

Person

Reference: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying

Function.Flight Crew: Captain

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days: 198

Experience.Flight Crew.Type: 14000

ASRS Report Number. Accession Number: 1129035

Human Factors: Other / Unknown

Events

Anomaly.Deviation - Procedural : Published Material / Policy Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Automation: Aircraft Other Automation

Detector.Person: Flight Crew When Detected: In-flight

Result.General: None Reported / Taken

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Company Policy Contributing Factors / Situations : Human Factors

Primary Problem: Human Factors

Narrative: 1

On short final to a low night IMC ILS approach, before the "approaching minimums" call, the Pilot Flying inadvertently selected TOGA in addition to deselecting autothrottle and autopilot. As Pilot Monitoring, I could see a glow from the ALS but I don't know what the Pilot Flying saw; he did not verbalize his intention to start manual control of the aircraft. My first indication was the flight director (FD) bars commanding a climb and a 30 knot increase in target airspeed. Looking lower over the nose, I could see the ALS and TDZ. With the FD providing GA guidance, the Pilot Flying had difficulty flying raw ILS data and transitioning to visual flight reference with the PAPI. With a wind shift from left quartering tailwind to right crosswind, the Pilot Flying executed some track and glideslope oscillations and we got a SINK RATE warning from the GPWS below 100 feet RA. I called for nose up and power while backing up the Pilot Flying on the controls. A nominal touchdown and roll out was made. In the short time frame of the event from FD mode change, through what is our status (VMC), to departure from glideslope, I considered trying to re-establish proper FD ILS guidance, but thought outside visual reference and less heads down FMS management would be better.

Short answer, better training. On a subsequent CAVU night, cleared for the visual approach, cleared for landing using ILS guidance, I selected TOGA at 400 feet AGL to see if FD ILS guidance could be re-established quickly. With the Pilot Flying going high on the glideslope in short order, LOC but not glideslope guidance was reacquired. From this limited analysis, it appears a quick de-selection of the FD's per FOM would have been our best course to eliminate confusing guidance. For decades, standard simulator training has entailed very predictable transitions from IMC to VMC landing, or no landing environment sighted/fouled runway GA's and missed approaches all at the charted approach minimums. With landing visibility, maintaining the aircraft's current glidepath and course with minimal adjustment gives a high successful landing rate, there's not much time for the pilot to deviate. Perhaps adding a variable approach scenario with higher ceiling and visibility (the more common real world situation) to practice the IMC to VMC transition with erroneous FD quidance added to improve pilots' competence and response to an abnormal. Globally, the requirements to use the highest levels of automation and maintain electronic glideslope when available has degraded large airline commercial pilots' basic airmanship abilities from VFR maneuvering to raw data instrument navigation. An old rule of thumb was Aviate, Navigate, Communicate. To that I would put communicate as the fourth priority. On the line, I see making inputs to the FMC as the highest priority in 99% of the first officers. Prime example: new ATC clearance, "ABC turn right heading 330, direct XYZ when able." With the aircraft in Heading Select, autopilot engaged, instead of guickly complying with ATC instructions with a one-step twist of the Heading Select knob on the MCP, the First Officer goes heads down to the CDU and executes six to seven keystrokes,

verify with Pilot Monitoring, execute, and select LNAV while the aircraft has traveled four to six miles straight ahead, not turning as cleared by ATC. I just think it is very indicative of an over reliance on automation and a deterioration of thinking and flying ability.

Synopsis

B737-800 Captain reports an inadvertent TOGA selection by the flying First Officer, approaching minimums, followed quickly by deselecting autopilot and autothrust. The approach is continued to landing in marginal VMC with some glideslope excursions and the flight director indicating go-around.

Time / Day

Date: 201203

Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: SFO.Airport

State Reference : CA

Altitude. MSL. Single Value: 1000

Environment

Weather Elements / Visibility: Windshear

Aircraft

Reference : X

ATC / Advisory.Tower : SFO Aircraft Operator : Air Carrier Make Model Name : A320 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121

Mission: Passenger Flight Phase: Takeoff Airspace.Class B: SFO

Component

Aircraft Component: Autothrottle/Speed Control

Aircraft Reference: X

Problem: Improperly Operated

Person

Reference: 1

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Experience.Flight Crew.Total: 11000
Experience.Flight Crew.Last 90 Days: 200

Experience.Flight Crew.Type: 2000

ASRS Report Number. Accession Number: 1001517

Human Factors: Situational Awareness Human Factors: Human-Machine Interface

Events

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Track / Heading : All Types Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter: Weather / Turbulence

Detector.Person: Flight Crew

When Detected: In-flight

Result.General: Maintenance Action

Result.Flight Crew: Returned To Clearance Result.Flight Crew: Became Reoriented

Result.Air Traffic Control: Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem: Human Factors

Narrative: 1

On takeoff roll I set the power levers in the flex detent, confirmed the position and raised my hand off the levers. In placing his hand on the levers the Captain managed to advance the levers to TO/GA. I was not aware of this. Rotation was normal; I began the immediate left turn using the flight director to follow the PORTE departure off runway 19R. At the annunciation for power reduction I moved the levers aft one click and advanced them one click thinking I had selected MCT. In actuality I had selected TO/GA. The flight directors then indicated a steep climb and a turn back to runway heading which would have taken us into terrain. While in IMC trying to understand the indications, we hit a 30+ knot increase shear. The speed tape blurred and jumped to 250. I called for flap retraction and managed speed. Because we were in TOGA managed speed could not be selected. I called for speed intervene 250. I maintained a left turn to continue the PORTE departure ignoring the command bars right turn. Within seconds the sheer was over and the speed tape jumped back to 220 KTS. There was never a sheer warning. Tower gave us a heading and directions to proceed to a fix further along the departure. Tower then asked what departure we were flying. The Captain stated the PORTE and that we encountered turbulence and sheer and therefore had trouble navigating. Tower stated "No problem". Obviously I was not precisely on track because the aircraft was in the go around mode and indicating direction to fly a programmed climb and track.

Synopsis

A320 First Officer reports inadvertent selection of TOGA thrust during a planned flex thrust takeoff and the problems encountered at thrust reduction/clean up altitude. Thrust levers are retarded one detent to get into the auto flight climb mode then advanced one detent to maintain MCT (actually TOGA), putting auto flight into go around mode. A flap overspeed occurs due to windshear and the high thrust setting.

Time / Day

Date: 200803

Local Time Of Day: 0601-1200

Place

Locale Reference.ATC Facility: ZID.ARTCC

Altitude.MSL.Single Value: 28000

Environment

Flight Conditions: VMC

Light : Daylight Ceiling : CLR

Aircraft

Reference: X

ATC / Advisory.Center : ZID.ARTCC

Aircraft Operator : Air Carrier

Make Model Name: Regional Jet 200 ER/LR (CRJ200)

Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Descent
Route In Use.STAR: TIGGR
Airspace.Class A: ZID.A

Component

Aircraft Component: Autoflight System

Aircraft Reference: X

Problem: Improperly Operated

Person

Reference: 1

Location Of Person.Aircraft: X Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying Experience.Flight Crew.Total: 8400 Experience.Flight Crew.Last 90 Days: 130

Experience.Flight Crew.Type: 6600

ASRS Report Number. Accession Number: 780186

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Detector.Person: Flight Crew

Result.Flight Crew: Returned To Clearance

Result.Flight Crew: Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem: Human Factors

Narrative: 1

AT FL280 ON THE TIGGR1 ARR, THE FO WAS ADJUSTING THE THRUST LEVERS AND INADVERTENTLY HIT THE TOGA BUTTONS AND LOOKED AT ME. I INSTRUCTED HIM TO FLY THE ACFT. HE TOOK THE FLT CTLS AND PITCHED INTO THE FLT BARS. REALIZING THE PITCH OF THE TOGA BUTTONS WAS INDICATING A CLB, I TOLD HIM TO DSND. HE DID NOT REACT IMMEDIATELY TO MY INSTRUCTION. I PUSHED FORWARD ON THE YOKE. WE CLBED 200-300 FT ABOVE FL280. WE DSNDED BACK TO ALT. WE DISCUSSED THE USE OF AUTOMATION. ALSO VERIFYING THE FLT DIRECTOR COMPARED TO WHAT THE ACFT SHOULD BE DOING.

Synopsis

CARJ FO INADVERTENTLY ENGAGES TOGA DURING DESCENT. ALTDEV RESULTS.

Time / Day

Date: 200206

Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: SABE.Airport

State Reference: FO

Relative Position. Distance. Nautical Miles: 0

Altitude.AGL.Single Value: 0

Environment

Flight Conditions: VMC

Light: Daylight

Aircraft

Reference: X

Aircraft Operator: Air Carrier

Make Model Name: B777 Undifferentiated or Other Model

Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 121

Flight Plan: IFR

Hight Plan : IFR Mission : Passenger Flight Phase : Landing

Component

Aircraft Component: Autothrottle/Speed Control

Aircraft Reference: X

Problem: Improperly Operated

Person: 1

Reference: 1

Location Of Person.Aircraft: X Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience.Flight Crew.Total: 14000 Experience.Flight Crew.Last 90 Days: 210

Experience.Flight Crew.Type: 400

ASRS Report Number. Accession Number: 551538

Analyst Callback: Completed

Person: 2

Reference: 2

Location Of Person.Aircraft: X Reporter Organization: Air Carrier Function.Flight Crew: First Officer Function.Flight Crew: Pilot Not Flying

Person: 3

Reference: 3

Location Of Person.Aircraft: X Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying Function.Flight Crew: Relief Pilot

Person: 4

Reference: 4

Reporter Organization: Government Function.Air Traffic Control: Local

Events

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly. Deviation - Procedural: Published Material / Policy

Anomaly.Other

Detector.Automation: Aircraft Other Automation

Detector.Person: Flight Crew

Result.Flight Crew: Overrode Automation

Result.Flight Crew: Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem: Human Factors

Narrative: 1

ALL NIGHT FLT FROM MIA TO EZE. COPLT LANDED. I TOOK CTL AT 80 KTS. I LOWERED THE THRUST REVERSER LEVERS. I AM NOT SURE WHAT I DID, BUT I KNOW THAT I MOMENTARILY MOVED MY HAND FROM THE THROTTLES. THE FATIGUE CAME IN TO PLAY NEXT BECAUSE WHEN I PUT MY HAND BACK SOMETHING WAS NOT RIGHT, BUT I WAS NOT SURE WHAT IT WAS. MY HAND WAS HANGING THERE AND I FELT THAT IT WAS SUPPOSED TO BE RESTING ON SOMETHING, SO I PUT MY HAND ON MY R ARMREST. ABOUT THEN, THE WARNING HORN STARTED AND THE FLAP CONFIGN EICAS WARNING CAME ON. I STILL DID NOT REALIZE WHAT WAS GOING ON. THAT WAS WHEN I SENSED A SMALL ACCELERATION AND THE FATIGUE DID NOT MATTER BECAUSE INSTINCT TOOK OVER. MY HAND WENT FORWARD, GRABBED THE THROTTLES AND BROUGHT THEM TO IDLE. I DISCONNECTED THE AUTOTHROTTLES. THIS IS MY BEST GUESS ABOUT WHAT HAPPENED. SOMEHOW I TOUCHED THE TOGA SWITCHES ON THE FRONT SIDE OF THE THROTTLES. ON THE B777 THESE WILL ONLY ENGAGE BELOW 50 KTS ON THE GND. MY FLT HOME WAS A SCHEDULED DEADHEAD ON A B767 SO I HAVE NOT BEEN ABLE TO LOOK AT THE THROTTLE GEOMETRY SINCE THEN TO SEE HOW EASY IT WOULD BE TO CASUALLY TOUCH THESE SWITCHES. ALSO, I DO NOT KNOW IF THE SENSITIVITY OF THE SWITCHES IS ADJUSTABLE AND I HAPPENED TO HAVE SOME SUPER-SENSITIVITY SWITCHES. IF I ENGAGED THE AUTOTHROTTLES WITHOUT KNOWING IT, I AM SURE THAT SOMEONE ELSE COULD DO IT TOO. ANYWAY, HAVING ENGS THAT COULD UNEXPECTEDLY GO TO 90000 LBS OF THRUST ON A TXWY OR IN THE RAMP AREA MIGHT AT LEAST REQUIRE A WARNING IN THE OPS MANUAL. THE OTHER THING ABOUT THE FATIGUE WAS THAT I REALLY DID NOT THINK CLRLY ABOUT WHAT HAPPENED UNTIL I HAD GONE TO THE HOTEL AND SLEPT FOR ABOUT 6 HRS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR HAS EXTENSIVE EXPERIENCE IN MCDONNELL DOUGLAS ACFT THAT HAS A DISSIMILAR TOGA ACTIVATION SWITCH. AFTER FURTHER THOUGHT AND INVESTIGATION OF THE POS OF THE SWITCH ON THE B777, HE STATED THAT HE PROBABLY ACTIVATED THE SWITCH INADVERTENTLY DUE TO HIS FATIGUED CONDITION COMBINED WITH HIS RELATIVE INEXPERIENCE IN THE ACFT.

Synopsis

INADVERTENT ACTIVATION OF TOGA DURING LNDG ROLL ON A B777 AT THE END OF A LONG INTL FLT.

Time / Day

Date: 199011

Local Time Of Day: 1201-1800

Place

Locale Reference.ATC Facility: CLE

State Reference : OH

Altitude.MSL.Single Value: 39000

Environment

Flight Conditions: VMC

Light: Daylight

Aircraft

ATC / Advisory.Center : ZOB Aircraft Operator : Corporate

Make Model Name: Medium Large Transport, Low Wing, 2 Turbojet Eng

Crew Size. Number Of Crew: 2

Flight Plan: IFR
Mission: Training
Flight Phase: Cruise
Flight Phase: Cruise
Airspace.Class A: ZOB

Person: 1

Reference: 1

Reporter Organization.Other Function.Flight Crew: First Officer

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience.Flight Crew.Total: 13100 Experience.Flight Crew.Last 90 Days: 90

Experience.Flight Crew.Type: 45

ASRS Report Number. Accession Number: 163472

Person: 2

Reference: 2

Reporter Organization.Other Function.Flight Crew: Pilot Flying Function.Flight Crew: Captain

Qualification.Flight Crew: Air Transport Pilot (ATP)

Person: 3

Reference: 3

Reporter Organization : Government Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control: Fully Certified

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly. Deviation - Altitude : Excursion From Assigned Altitude

Detector.Person: Flight Crew

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Returned To Clearance

Assessments

Primary Problem: Human Factors

Narrative: 1

WE WERE LEVEL AT FL390 ON A TRNING FLT FROM SAVANNAH, GA, TO DETROIT WILLOW RUN. A PHASE II MODIFICATION HAD JUST BEEN COMPLETED TO THE CPR LTT INCORPORATING, AMONG MANY CHANGES TO THE FMS AND AUTOTHROTTLES. WHILE WE WERE IN STEADY STATE LEVEL FLT, THE GO AROUND BUTTON WAS HIT BY ACCIDENT BY A CLIP BOARD; THIS CAUSED THE AUTOPLT TO DISENGAGE AND THE THROTTLES TO ADVANCE TO TKOF THRUST. FOLLOWING THE CONFUSION OF THE MOMENT THE ACFT STARTED TO CLB, DUE TO ACCELERATION CAUSED BY THE ADVANCEMENT OF THE AUTOTHROTTLES. BY THE TIME WE REENGAGED THE AUTOPLT AND STOPPED THE CLB, WE HAD GAINED ABOUT 400'.

Synopsis

INADVERTENT GO AROUND MODE ACTIVATION ON ADVTECH CPR MLG LEADS TO ALT EXCURSION.