

**ASRS Database Report Set**

**Maintenance Reports**

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Report Set Description.....A sampling of reports from aircraft maintenance personnel.

Update Number.....33

Date of Update .....November 6, 2023

Number of Records in Report Set.....50

Records within this Report Set have been screened to assure their relevance to the topic.

National Aeronautics and  
Space Administration

**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.

A handwritten signature in cursive script that reads "B. Hooey".

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.

# Report Synopses

ACN: 2017070 *(1 of 50)*

### Synopsis

B737 Technician reported that an EA (Engineering Authorization) does not have a sufficient fuel nozzle leak check process after fuel nozzle post-replacement work is completed. If the leak test is not performed and a potential problem goes undetected, the reporter states that it can lead to in-service engine fires.

ACN: 2010947 *(2 of 50)*

### Synopsis

Aircraft Maintenance Technician reported pressure from Maintenance Control department to install incorrect part onto airplane.

ACN: 2008358 *(3 of 50)*

### Synopsis

Aircraft Maintenance Technician reported an inadvertent discharge of the cargo pit fire extinguisher bottle during a maintenance check.

ACN: 2008352 *(4 of 50)*

### Synopsis

Maintenance Technicians reported missing a procedural step when deferring a thrust reverser while the aircraft was at the gate prior to departure.

ACN: 2005229 *(5 of 50)*

### Synopsis

Maintenance Manager reported non compliance with MEL procedure and incorrect maintenance practices led to water leaking into the Lower avionics compartment, causing system failures on a B747 aircraft.

ACN: 2000321 *(6 of 50)*

### Synopsis

Technician reported concerns over trouble shooting and the correct application of an MEL while working in a B777-200.

ACN: 2000320 *(7 of 50)*

### Synopsis

Technician reported non compliance with MEL (M) procedures were discovered during trouble shooting and deferring of a right ram air full open light during flight. The correct procedures were complied with and the aircraft was returned to service.

ACN: 2000318 *(8 of 50)*

### Synopsis

Technician reported communications problems caused the oil tank service cap to be left uninstalled after maintenance.

ACN: 2000315 *(9 of 50)*

### Synopsis

Technician reported a 20 AMP plug was substituted for a 30 AMP plug during repair of a ground power unit power supply cord.

ACN: 2000314 *(10 of 50)*

### Synopsis

Inspector reported procedural errors caused a thrust reverser sleeve to be installed without correct certifications and tracking information after being removed serviceable (robbed) for installation on another aircraft.

ACN: 2000313 *(11 of 50)*

### Synopsis

Avionics Lead Technician reported ground damage from an improperly positioned scissors lift contacting the TE right OB flap.

ACN: 1999227 *(12 of 50)*

## Synopsis

Technician reported spinning nut plates were discovered during a SATCOM radome removal. The spinning nut plates were not properly documented and the aircraft continued to operate in service.

ACN: 1999226 *(13 of 50)*

## Synopsis

Air carrier ground shipping personnel reported the erroneous shipment of a dangerous goods parcel as regular cargo instead of following hazmat shipment procedure.

ACN: 1998951 *(14 of 50)*

## Synopsis

Repair station owner reported during disassembly for paint, all flight control pivot point bearings either fell apart when removed from aircraft or were completely frozen when further inspection was performed.

ACN: 1998950 *(15 of 50)*

## Synopsis

Technician reported the aircraft's engine was disassembled after magneto failure and it was found that the required magneto bearings had not been reinstalled after overhaul.

ACN: 1997883 *(16 of 50)*

## Synopsis

Technicians reported failure to follow procedures and communication issues caused an inadvertent nose landing gear retraction during operational checks following maintenance.

ACN: 1994035 *(17 of 50)*

## Synopsis

Technician reported confusion over a Fan Blade Lubrication Task Card included in the initial overnight work package. After completing the Task Card, it was discovered to be no longer included in the work package and was intended to be deleted. The aircraft was later grounded at another station to make paperwork corrections.

ACN: 1993158 *(18 of 50)*

### Synopsis

Technicians reported a previously documented crack on the RH Flap Inboard Leading Edge had elongated, and was now non-airworthy. The aircraft was removed from service. This was found on a pilot's pre-flight inspection.

ACN: 1993105 *(19 of 50)*

### Synopsis

Maintenance Manager reported a Maintenance Technician drove a truck under the nose of a parked aircraft in violation of company procedure.

ACN: 1992470 *(20 of 50)*

### Synopsis

B737-800 Technician reported failing to fully open the valve on the crew oxygen bottle and also improperly read the pressure gauge during a system check per the Aircraft Maintenance Manual. Another Technician later discovered the error during an operations check. The discrepancy was addressed and fixed.

ACN: 1991185 *(21 of 50)*

### Synopsis

A319 Technician reported incorrect trouble shooting and recording of data led to an engine failure on take-off. Communications between maintenance and engineering caused critical engine data to not be reviewed and reported to appropriate personnel, allowing the engine to remain in service without proper inspections and maintenance action.

ACN: 1990213 *(22 of 50)*

### Synopsis

Repair station Technician reported issues with UL94 aviation fuel dissolving cadmium and holding it in suspension, causing clogging of fuel system components. Technician stated pilots are reporting loss of engine power.



ACN: 1989515 *(23 of 50)*

### Synopsis

Technician reported replacing fan blades on the incorrect engine of a B777.

ACN: 1989510 *(24 of 50)*

### Synopsis

A320 technicians reported a part was robbed from an aircraft and installed on another aircraft, but it was the wrong part number for that aircraft.

ACN: 1988684 *(25 of 50)*

### Synopsis

Technicians reported communication and coordination problems led to not installing a brake axle spacer when replacing a main wheel tire assembly. The tire and wheel assembly failed catastrophically in service.

ACN: 1988172 *(26 of 50)*

### Synopsis

Air carrier maintenance stores personnel reported receiving a COMAT parcel without required Hazmat documents or labels. The shipper failed to complete required Hazmat documents.

ACN: 1988166 *(27 of 50)*

### Synopsis

Technician reported ambiguity in MEL process during trouble shooting of a thrust reverser unlocked indication. The MEL did not specifically prohibit dispatch with an unlocked indication present with the thrust reverser locked out.

ACN: 1986432 *(28 of 50)*

### Synopsis

Maintenance Controller reported non compliance with SOP and MEL procedures allowed an aircraft to fly in revenue service with known, inoperative passenger oxygen system components.

ACN: 1985489 *(29 of 50)*

### Synopsis

Technician reported finding missing bushings and barrel nuts on a thrust reverser sleeve that was removed for repair.

ACN: 1984183 *(30 of 50)*

### Synopsis

Technician reported during ETOPS PDC inspection of a B777 aircraft, found an MLG Wheel #3 Axle with brake sleeve missing.

ACN: 1982140 *(31 of 50)*

### Synopsis

Air carrier Maintenance Stores Supervisor reported a Hazmat box arrived for shipment with incomplete documentation, missing required Hazmat labels, and bypassed the Hazmat processing system. The Hazmat box was removed for correction.

ACN: 1981467 *(32 of 50)*

### Synopsis

Air carrier maintenance technician reported inadvertently shipping a set of aircraft parts without a required hazmat label.

ACN: 1978585 *(33 of 50)*

### Synopsis

Maintenance Planner and Crew Chief reported the wrong engine was replaced during a scheduled maintenance resulting in overflying an engine that required replacement due to time cycle restricted components having reached their service limit. The aircraft was removed from service to correct the discrepancies.

ACN: 1978393 *(34 of 50)*

### Synopsis

Technicians reported an aircraft performed an air turn back after replacing the R/H Aft Emergency Exit Door Seal.

ACN: 1977944 *(35 of 50)*

### Synopsis

Technician reported failing to remove Leading Edge Flaps Lock Out Pins from the Standby Drive Shut Off Valve during the reactivation process.

ACN: 1977007 *(36 of 50)*

### Synopsis

B777 Technician reported during their troubleshooting they noted one of the P310 cards was held in place by a tie-wrap. Aircraft was out of service for maintenance.

ACN: 1976779 *(37 of 50)*

### Synopsis

Technicians reported communications issues and confusion when attempting to troubleshoot an aircraft on a return to gate for F/CTL FAULT Spoiler #1 LEFT and RIGHT ECAM message.

ACN: 1974977 *(38 of 50)*

### Synopsis

B737 MAX technicians and Inspector reported there was a lack of compliance with procedures with the repair of an aircraft that had a discrepancy with the elevator trim. Damage had been discovered to structural components within the center pedestal and was misidentified to be within limits.

ACN: 1974740 *(39 of 50)*

### Synopsis

PC-12 Inspector reported the engine was improperly rigged after an engine change. During a post-maintenance test flight, the torque and propeller RPM was improperly high and the pilot notified Maintenance upon arrival.

ACN: 1974320 *(40 of 50)*

### Synopsis

Maintenance Control Technician reported misapplying an MEL due to confusion between B737 and A320 aircraft. The aircraft was taken out of service to address the issue.

ACN: 1974319 *(41 of 50)*

### Synopsis

A321 Maintenance Inspector reported that a repetitive write-up that should have required additional maintenance actions went unnoticed and there was a non-compliance with procedures.

ACN: 1974307 *(42 of 50)*

### Synopsis

Technicians reported a rig pin attached to a red streamer was left installed in the #2 engine when the engine cowls and thrust reversers were closed and a post maintenance engine run was accomplished.

ACN: 1974302 *(43 of 50)*

### Synopsis

A320 Maintenance Supervisor reported signing off a log page and learning that the incorrect and ineffective part was used after the aircraft was released.

ACN: 1974157 *(44 of 50)*

### Synopsis

Air carrier maintenance store personnel reported an ongoing Hazmat violation due to the lack of proper storage cabinet during Hazmat handling.

ACN: 1971779 (45 of 50)

### Synopsis

Technician reported errors in measurements after a firewall was fabricated and replaced on a C172 aircraft. A Design Engineering Representative was engaged to approve the fabrication and replacement.

ACN: 1971414 (46 of 50)

### Synopsis

Technician reported a Nose Inlet Cowl with extensive history for a Pressure Relief Door opening in flight is still in service without correct documentation or Maintenance action.

ACN: 1970914 (47 of 50)

### Synopsis

Technicians reported attaching bolt was left uninstalled during a Fuel Nozzle installation. The aircraft suffered damage to a Thrust Reverser Translating Sleeve due to burn through.

ACN: 1970912 (48 of 50)

### Synopsis

Technicians reported ground damage to the #1 Engine Inlet Cowl during a reposition to the fuel pits from the dock. The aircraft was towed into a parked scissors lift.

ACN: 1969022 (49 of 50)

### Synopsis

Technicians reported a damaged Bulk Cargo Door Seal was replaced incorrectly resulting in the aircraft unable to pressurize and returning to departure airport.

ACN: 1968242 (50 of 50)

### Synopsis

Technician reported a Ramp/Cargo Manager cleared an aircraft for operation following a reported engine leak. The Technician reported this to Maintenance and the aircraft was directed to return to the gate for Maintenance action.

# Report Narratives

## Time / Day

Date : 202307

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : B737 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase : Parked  
Maintenance Status.Maintenance Type : Scheduled Maintenance  
Maintenance Status.Maintenance Items Involved : Repair

## Component

Aircraft Component : Powerplant Fuel System  
Aircraft Reference : X  
Problem : Design

## Person

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
ASRS Report Number.Accession Number : 2017070

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Maintenance  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Company Policy  
Contributing Factors / Situations : Manuals  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

**EA (Engineering Authorization) doesn't require sufficient fuel nozzle leak check to prevent possible in-service engine fires.** Nitrogen leak check with a leak test solution is a - CFM best practice - but has not been adopted by Company A in this EA, nor has Boeing included it in the remove and replace of the nozzles in their AMM (Aircraft Maintenance Manual). The nitro leak check can be found in the adjustment/test section just after fuel nozzle section. This nitrogen leak test needs to be included in the Leap 1B Fuel Nozzle post replacement work card. Proof is a recent incident. During the required - idle leak check - after full set of fuel nozzles were replaced, our technicians discovered an oil leak, but no

fuel leak. After a 70% part power engine run using bag method at drain lines, a significant fuel leak developed in the hot section. Other report [from weeks ago] of hot section fires support the need to do a best practice leak check. In the interim while tooling and leak detector liquid are on order, I feel need to require EA be revised to require a high power engine run after fuel nozzles are replaced or proper nitrogen test equipment tooling and leak detector can be used. Suggested resolution - an immediate resolution. In the interim, while tooling and leak detector liquid are on delay due to availability of leak check - not owned - and tooling repairs needed, I relay this feedback from the technicians on the floor: Require EA be revised to require a high power engine run after fuel nozzles are replaced and a subsequent opening of the core cowls to inspect for fuel stains, leaks in manifold, and nozzles area.

## Synopsis

B737 Technician reported that an EA (Engineering Authorization) does not have a sufficient fuel nozzle leak check process after fuel nozzle post-replacement work is completed. If the leak test is not performed and a potential problem goes undetected, the reporter states that it can lead to in-service engine fires.



## Time / Day

Date : 202306

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Make Model Name : Beechjet 400

Flight Phase : Parked

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Work Cards

Maintenance Status.Maintenance Items Involved : Inspection

## Component

Aircraft Component : Exterior Pax/Crew Door

Problem : Design

## Person : 1

Location Of Person : Repair Facility

Reporter Organization : Contracted Service

Function.Maintenance : Lead Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 2010947

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Maintenance

## Person : 2

Location Of Person : Repair Facility

Reporter Organization : Contracted Service

Function.Maintenance : Inspector

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 2011261

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance

When Detected: Other  
Result: General : Work Refused

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Company Policy  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Incorrect / Not Installed / Unavailable Part  
Primary Problem : Incorrect / Not Installed / Unavailable Part

## Narrative: 1

ZZZ Maintenance facility received main cabin door steps for a BeechJet 400XP. Prior to installing the steps on the aircraft the technician verified part number in the manufactures Illustrated Parts Catalog (IPC). It was found that the part number received was not effective for our serial number of aircraft. The technician notified maintenance control of this discrepancy in hopes that they had documentation from the manufacturer stating we could use the part number received. Maintenance control told the technician that we are allowed to use all the part numbers of stairs in the IPC no matter the effectivity. They could not provide any documentation showing this from the manufacturer. After phone calls from the manufacturer they stated they did not have any documentation showing all stairs were applicable to all serial number of aircraft. Maintenance control continued to try and pressure the technician into making a bad decision and install the stairs on the aircraft without documentation because they said and I quote "We have been doing it like that for years." This creates a bad culture, an unsafe aircraft condition and noncompliance with the manufacturer manual. Encourage maintenance control to comply with the manufacturer maintenance manual at all cost.

## Narrative: 2

BeechJet 400XP was in for routine/ non-routine maintenance at ZZZ. A set of air-stair-stairs were to be replaced and a lead maintenance noticed the Parts Number (PN) on the manual did not appear in the Illustrated Parts Catalog (IPC) Quality Control was alerted. I contacted Person A and was told to contact the Person B and another person. The answer was the following from Maintenance Controller. "The IPC doesn't list an effectivity code for these stairs. They are approved for all 400 series aircraft. " A maintenance lead and I challenged that answer and asked for something in writing that states we can install them on the aircraft. I responded with: "We can't force the installer to sign the release for this event. If, the end user which determines airworthiness of a part (mechanic) discovers a conflict in traceability and proper identification of the part he's doing the right thing no matter the component. "The manual is a document that provides the installer data to determine airworthiness, in this case the installer has conflicting data." I/ we received the following answer from Maintenance Controller. " I'm done with this... rob the stair assembly or whatever parts need from Aircraft Y and get us a Color X aircraft please! " Upon inspecting the stairs on the other aircraft (donor) before removal the PN was checked. It was discovered the effectivity is incorrect for the installation on the other aircraft. Maintenance and Quality Control both were assertive with Maintenance Controller, and did not install the stairs that were to be removed and installed on the original aircraft. We still had the effectivity issue. In the meantime, Quality Control and Maintenance at ZZZ started email chains with Company explaining the issue. Maintenance and Quality Control were looking for a solution not engaging in a back and forth. I, being involved in this issue began to gather information from individuals on the floor. A conversation took place between Maintenance Controller and a maintenance lead. Paraphrasing the leads words: [Instead of finding a solution they (Maintenance Controller) became more and

more agitated to the point it was bordering on a threat, it was very uncomfortable. They said we're just making stuff up cuz we don't want to fix it. Keeping this short as possible the result was an inspector in ZZZ contacted Company and sorted out the effectivity and the correct assembly that appears in the IPC was shipped and installed. My over all concern is we are creating a hazard an opportunity for a safety escape. A quick example: a young mechanic and or an unassertive one feels the pressure installs an incorrect part or something of that nature because Maintenance Controller is "demanding it be done". The next time it could be a navigation download or incorrect push rod for a trim tab we must address this issue. Company must update their IPC for the 400 which is the root cause for this entire situation. Mechanics and pilots have a symbiotic relationship with one goal, preserving human life, by providing a safe product. Maintenance Controller must be trained/ counseled covering what authority they have and do not. Maintenance Controller does not have the final say, nor are in any position to demand anything that is obviously outside of FAR's, company manuals and Policy. Young mechanics need to be educated on the exact role of Maintenance Controller and understand their direction and leadership come from the Maintenance manager, production managers and leads not Maintenance Controller. Maintenance Controller does not make airworthy decisions for anyone, the techs, leads, and pilots make that decision. Maintenance Controller does however, release the aircraft back into service. However, that release is 100% predicated on the signatures, paperwork, and final determination of airworthiness completed by maintenance and Quality Control pilots.

## Synopsis

Aircraft Maintenance Technician reported pressure from Maintenance Control department to install incorrect part onto airplane.

## Time / Day

Date : 202206

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : A300  
Operating Under FAR Part : Part 121  
Mission : Cargo / Freight / Delivery  
Flight Phase : Parked  
Maintenance Status.Maintenance Type : Unscheduled Maintenance  
Maintenance Status.Maintenance Items Involved : Inspection

## Person

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
ASRS Report Number.Accession Number : 2008358  
Human Factors : Situational Awareness  
Human Factors : Training / Qualification

## Events

Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Maintenance  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Human Factors  
Primary Problem : Human Factors

## Narrative: 1

While helping preform a job card ( Aileron Servo Controls), I was in the cockpit when I noticed what appeared to be broken snap wire on the guarded switch to the agent discharge for the cargo compartment fire extinguisher. When I pulled on the guarded switch to check if the snap wire was indeed broken I accidentally discharged the #1 fire extinguisher bottle to the forward pit. I should have pulled the circuit breaker before checking the guard switch to prevent to fire extinguisher bottle from discharging.

## Synopsis

Aircraft Maintenance Technician reported an inadvertent discharge of the cargo pit fire extinguisher bottle during a maintenance check.

## Time / Day

Date : 202306

Local Time Of Day : 1801-2400

## Place

Altitude.AGL.Single Value : 0

## Environment

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 MAX 8

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Type : Unscheduled Maintenance

## Component

Aircraft Component : Turbine Engine Thrust Reverser

Aircraft Reference : X

Problem : Malfunctioning

## Person : 1

Location Of Person : Gate / Ramp / Line

Reporter Organization : Contracted Service

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 2008352

Human Factors : Training / Qualification

Human Factors : Time Pressure

Human Factors : Distraction

## Person : 2

Location Of Person : Gate / Ramp / Line

Reporter Organization : Contracted Service

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 2008353

Human Factors : Time Pressure

Human Factors : Distraction

Human Factors : Training / Qualification

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
When Detected.Other  
Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Company Policy  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Staffing  
Primary Problem : Human Factors

## Narrative: 1

I was given a gate call tonight on a MAX 8 for a maintenance light. I am a probationary mechanic with helicopter experience and King Air experience. I have no 737 or big jet experience, none the less I went out with confidence in my abilities of reading the manuals and the few months of experience on the aircraft. AMT 2 another probationary mechanic with 4 months of experience on the aircraft came to help me out to the best of his abilities, He also has only 4 months of 737 experience. We arrived at the aircraft and I have personally never worked with the Multi-Functional Display (MFD) but tried to work my way through it. We found that there was a #2 thrust reverser fault. We were first going to troubleshoot the TR (Thrust Reverser) by cycling it and running a bite test. Unfortunately before we got to that we directed by the lead mechanic to defer the #2 TR. So we started looking into the deferral procedure for the #2 TR in which me and AMT 2 have never performed before. We started with adding the inboard TR lock to the #2 ENG then came back up the ramp to read more into the deferral procedure. We had the gate personnel hassling us on how long it will take along with the flight attendant who was very impatient with us. We then added safety wire to the #2 TR to restrict forward movement and then I got on the phone with maintenance control to verify all the procedures were done properly. We then downgraded the aircraft to CAT 1 status and proceeded to fill out the paperwork along with the aircraft log book paperwork. At this point we were approached by the gate attendant who asked "how much longer". We proceeded to say we are just doing paperwork and will let you know but then the pilot said "well if you guys are just doing paperwork we can start boarding so by the time you are done the aircraft would be boarded". We finished the paperwork and added the correct placarding and sent the aircraft on its way fully confident for the safety of the passengers and crew. It wasn't till later in the shift that AMT 2 informed me that we never locked out the outboard TR with the lockout bolt. We immediately went to supervision to notify them of the situation. I contribute this to a lack of training on the aircraft. I have never deferred a thrust reverser in my career in aviation and felt thrown to the wolves. We were pressured by the flight crew and the gate personnel. We believed that we performed everything correctly but found a missed step in our deferral.

## Narrative: 2

A fellow coworker received a gate call for a Max 8 for a maintenance light. I decided to go with him and assist on the call. We both are on probation and have four months of 737 experience under our belts. After arriving at the aircraft, we notice there was a fault for the #2 Thrust Reversers. We decided to troubleshoot the T/R (Thrust Reverser) but was

soon directed by our lead mechanic to defer the T/R. Neither one of us has encountered this problem before, so we started to look up the procedure for the deferral. First, we started the task by locking out the inboard TR. Next, we went back up to the jetway to continue reading the task. While reading and trying to figure out what to do next we were bombarded by flight attendants' and gate agent's impatiently asking questions on what is wrong, how much longer, why is it taking so long. Trying to handle the situation accordingly and professionally we continued with safety wiring the #2 TR handle to the stowed position. While my Fellow coworker was on the phone with Maintenance Control I was filling out the logbook and trying to see how to downgrade the aircraft to a CAT 1 status. During this process, we were still being asked questions about boarding and how long it would take. Our response was we will let them know. We are working as fast as the matter allows us. Then, the pilot told the gate agent that if they are doing the paperwork they can start boarding now. Thinking that we performed the job correctly we released the plane back to the crew. It wasn't until later when I read the task again to get a better understanding without feeling pressured, rushed or without proper guidance I recall that we did not pin the outboard T/R sleeve. I brought it to my coworker's attention, and we immediately notified our supervisors of our mistake.

## Synopsis

Maintenance Technicians reported missing a procedural step when deferring a thrust reverser while the aircraft was at the gate prior to departure.

## Time / Day

Date : 202306

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

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 / Delivery

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Repair

Maintenance Status.Maintenance Items Involved : Inspection

## Component : 1

Aircraft Component : Drinkable/Waste Water Syst

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Component : 2

Aircraft Component : Minimum Equipment List (MEL)

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person



Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
Experience.Maintenance.Lead Technician : 10  
Experience.Maintenance.Technician : 10  
ASRS Report Number.Accession Number : 2005229  
Human Factors : Communication Breakdown  
Human Factors : Troubleshooting  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Other

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Detector.Person : Other Person  
Detector.Person : Flight Crew  
Were Passengers Involved In Event : N  
When Detected : Pre-flight  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection  
Result.General : Flight Cancelled / Delayed

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

Aircraft X arrived in ZZZ1 for a fuel and tech stop upon post and pre-flight inspection. Maintenance tech found water pouring out of the CAC door area. The Maintenance tech contacted Maintenance control and advised them of the finding. They were informed to defer maintenance instruction and deactivate the water system and keep the plane moving to next stop, after which the aircraft was going to ZZZ for Maintenance and will be addressed. The aircraft arrived in ZZZ on Date 1 and the Maintenance Manager of ZZZ told ZZZ staff to not get into anything and keep the plane green and they just wrote off the leak as not found. When asked if they worked it, he threatened myself saying he would never put his team on the spot again, and is releasing the aircraft into service with a known leak into a compartment that has computers and Inertial Reference Units (IRU). Company has very poor to no accountability and zero concerns from FAA as they always seem to get out of any investigation here is the email. First off understand the following: That Plane was never supposed to come here. They had no place to park in ZZZ2 and asked if we can make room for it at the very last minute. We were told to not work anything since everything was planned for another station but, we elected to. The plan was to keep the plane Green so that we didn't risk starting something that could potentially AOG the plane. Don't you ever put my team on the spot like that ever again. I understand they didn't find a leak but this is what's causing the brake problems. The computers are soaked in flight the system gets serviced and with the APU running its

pouring water. And if they did do any looking the cooling duct for the brake computer would be obvious it's laying in the water under the rack.

## Synopsis

Maintenance Manager reported non compliance with MEL procedure and incorrect maintenance practices led to water leaking into the Lower avionics compartment, causing system failures on a B747 aircraft.

## Time / Day

Date : 202211

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777-200

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

## Component : 1

Aircraft Component : AC Generator/Alternator

Aircraft Reference : X

Problem : Malfunctioning

## Component : 2

Aircraft Component : Minimum Equipment List (MEL)

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 2000321

Human Factors : Communication Breakdown

Human Factors : Situational Awareness  
Human Factors : Troubleshooting  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Maintenance  
When Detected : Aircraft In Service At Gate  
When Detected : In-flight  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Aircraft X was in ZZZ and had a fault on the Integrated drive generator and an ELEC GEN OFF EICAS Advisory message. The techs applied MEL 24-XX-X. There is concern with the T/S.

## Synopsis

Technician reported concerns over trouble shooting and the correct application of an MEL while working in a B777-200.

## Time / Day

Date : 202305

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-900

Operating Under FAR Part : Part 121

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

## Component : 1

Aircraft Component : Air Conditioning and Pressurization Pack

Aircraft Reference : X

Problem : Malfunctioning

## Component : 2

Aircraft Component : Minimum Equipment List (MEL)

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 2000320

Human Factors : Troubleshooting

Human Factors : Human-Machine Interface

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

Was working Aircraft X with a open log for right ram air full open light during flight. Log page XXXXXXXX. After troubleshooting we decided to defer using MEL 21-XX-X, which was previously applied week and a half earlier ref log page XXXXXXY. After securing the forward SRADA (Stationary Ram Air Door Actuator), I started to work the aft SRADA. Found linkage part number C21009-2, S/N XXXXXXXX still installed from previous deferral in ZZZ. After removing linkage, We performed ops checks with success. Signed the plane off and it left.

## Synopsis

Technician reported non compliance with MEL (M) procedures were discovered during trouble shooting and deferring of a right ram air full open light during flight. The correct procedures were complied with and the aircraft was returned to service.

## Time / Day

Date : 202305

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

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 : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

## Component : 1

Aircraft Component : Other Documentation

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Oil Filler Cap

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 2000318

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Troubleshooting

Human Factors : Confusion

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
When Detected : Aircraft In Service At Gate  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

On the date on Aircraft X, Engineering Order was accomplished from step 5 to end of the Engineering Order at the hangar. The oil tank was flushed and replenished twice. 3 oil samples were to be taken: 1st sample after idle run, 2nd sample after high power run, 3rd sample after idle run again. After the last replenishment, the engine was ran at IDLE power for 10 minutes. After the idle run, the last oil sample was taken. No leaks found, after inspecting the area, spacers and hardware were found on the inside of the outboard cowling; the securing hardware was reinstalled on the thrust reverser actuator oil line. This deviation from closing the fan cowls may have been a distraction from properly securing the oil cap. The aircraft was sent to the gates. Refer to log page #XXXXXXX for maintenance information.

## Synopsis

Technician reported communications problems caused the oil tank service cap to be left uninstalled after maintenance.



## Time / Day

Date : 202305

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Make Model Name : No Aircraft

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

ASRS Report Number.Accession Number : 2000315

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Troubleshooting

Human Factors : Human-Machine Interface

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Ground Personnel

When Detected : Aircraft In Service At Gate

Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

Ground support equipment Mechanic was told to go look at an electrical problem. When he found what it was, he took it upon himself to try to repair it, but with wrong plug. It was a 30 AMP plug on the unit. He substituted a 20 AMP plug and could have caused a fire or electrical short, injuring people and the aircraft it was under. He is was working out of his bid area and had no idea what should have been done. The aircraft could still have been worked on, just no aircraft was available for 8 hours till day shift came in.

## Synopsis

Technician reported a 20 AMP plug was substituted for a 30 AMP plug during repair of a ground power unit power supply cord.

## Time / Day

Date : 202305

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A320

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Work Cards

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Testing

## Component : 1

Aircraft Component : Turbine Engine Thrust Reverser

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Company Operations Manual

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Function.Maintenance : Inspector

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 2000314

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness  
Human Factors : Time Pressure  
Human Factors : Training / Qualification  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
When Detected : Aircraft In Service At Gate  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Day 0, maintenance management robbed #1 engine LH reverser translating sleeve from a serviceable #1 engine LH thrust reverser assembly Company part number (P/N) XX-XXXX-X-XXXX, this thrust reverser was made serviceable over a month prior on Repair Order# XXXXXXX. Robbed #1 engine LH thrust reverser sleeve Company P/N XX-XXXX-X-XXX, was installed on Aircraft X without maintenance management following General Maintenance Manual (GMM) XX-XX-XX process, that is to fill out robbed unit tag and to make a serviceable tag after verifying the serviceable condition of the removed part. Also per GMM, the quality department Inspector is required to complete computer transactions to update removal and installation record of rotatable part. Stores receiving storekeeper was notified to make serviceable tag for robbed #1 engine LH thrust reverser translating sleeve after Technician installed on aircraft (storekeeper is not responsible for the serviceability of any robbed part, that is the responsibility of the Technician removing the robbed part). Storekeeper also completed the removal transaction in the computer system for the robbed #1 engine LH reverser sleeve. Maintenance management, stores never followed the GMM XX-XX-XX process and quality department failure to support the removal and installation process (computer transactions, off log and on log of thrust reverse sleeve). GMM XX-XX-XX Item-XA Pg.1 through Pg.10 basically states the Technician removing or installing a robbed part or component from an aircraft is responsible for compliance as outline in this GMM, also GMM Item XA (13) states robbing a rotatable component from another rotatable component such as engine, APU or landing gear, requires computer transactions. Signee assigned to the component installation will be responsible to complete all required entries (This was not accomplished by quality department). Making leadership responsible for not adhering to GMM procedures, too many departments never read the GMM on robbed components, putting pressure on workers just to get the aircraft back in service regardless of the situation, even when they have no knowledge of what the process is. For example the storekeepers who have never got involved in robbed parts before and are now told it is now their job. The Company

needs to stop taking short cuts and get serious with keeping their standards at a high level.

## Synopsis

Inspector reported procedural errors caused a thrust reverser sleeve to be installed without correct certifications and tracking information after being removed serviceable (robbed) for installation on another aircraft.

## Time / Day

Date : 202305

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777-200

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : N

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Work Cards

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Testing

## Component

Aircraft Component : Trailing Edge Flap

Problem : Malfunctioning

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Function.Maintenance : Lead Technician

Qualification.Maintenance : Avionics

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 2000313

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Ground Event / Encounter : Ground Equipment Issue

Anomaly.Ground Event / Encounter : Object

Detector.Person : Maintenance

When Detected : Aircraft In Service At Gate

Result.General : Maintenance Action

Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

I am an Avionics Lead Technician and had men assigned to work a Number 11 spoiler harness change. In an attempt to expedite the job, retrieved a scissor lift and while raising into position, sustained damage to TE right OB flap not realizing lift was not in far enough.

## Synopsis

Avionics Lead Technician reported ground damage from an improperly positioned scissors lift contacting the TE right OB flap.

## Time / Day

Date : 202211

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

## Component : 1

Aircraft Component : Fuselage

Manufacturer : SATCOM RADOME

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Minimum Equipment List (MEL)

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 1999227

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Troubleshooting  
Human Factors : Confusion

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

I and another AMT removed ViaSat radome from Aircraft X. While removing the fasteners, two of the fasteners I removed nut plates spun. These nut plates were side by side on trailing edge. So I did the temp repair per [Company repair document]. And sent the plane on its way. From what I remember there was another fastener with RTV [sealant] that was more than four fasteners away from the two that I put on. Since it had RTV, I was under the impression that it had its own [fastener].

## Synopsis

Technician reported spinning nut plates were discovered during a SATCOM radome removal. The spinning nut plates were not properly documented and the aircraft continued to operate in service.



## Time / Day

Date : 202305

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : No Aircraft

Operating Under FAR Part : Part 121

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Parts / Stores Personnel

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1999226

Human Factors : Workload

Human Factors : Troubleshooting

Human Factors : Time Pressure

## Events

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Ground Personnel

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

## Narrative: 1

I was assigned to work at the dock area, during the shipping process I miss read the paper work and shipped a battery as a regular package, it was 4 small batteries. I was trying to accomplish this job as soon as possible to start the next task. Pay more attention to details and slow down.

## Synopsis

Air carrier ground shipping personnel reported the erroneous shipment of a dangerous goods parcel as regular cargo instead of following hazmat shipment procedure.

## Time / Day

Date : 202305  
Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC  
Light : Daylight

## Aircraft

Reference : X  
Aircraft Operator : Personal  
Make Model Name : Cirrus Aircraft Undifferentiated  
Operating Under FAR Part : Part 91  
Flight Phase : Parked  
Maintenance Status.Maintenance Deferred : N  
Maintenance Status.Records Complete : N  
Maintenance Status.Released For Service : N  
Maintenance Status.Required / Correct Doc On Board : N  
Maintenance Status.Maintenance Type : Scheduled Maintenance  
Maintenance Status.Maintenance Items Involved : Installation  
Maintenance Status.Maintenance Items Involved : Inspection

## Component

Aircraft Component : Aeroplane Flight Control  
Aircraft Reference : X  
Problem : Failed

## Person

Location Of Person : Repair Facility  
Reporter Organization : FBO  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
Experience.Maintenance.Avionics : 10  
Experience.Maintenance.Inspector : 10  
Experience.Maintenance.Lead Technician : 30  
ASRS Report Number.Accession Number : 1998951  
Human Factors : Troubleshooting

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Primary Problem : Aircraft

## Narrative: 1

During routine disassembly of flight controls for painting, we found all flight control pivot point bearings either just fell apart when removed from aircraft or were completely frozen when further inspection was performed. After reading the maintenance manual we found that there is not a life span or time limit in service for these bearings that clearly have a time limit, no inspection and no continued airworthiness for this time limited part, and this part can not be serviced so it must have a time in service time limit and it has none according to the manufacture. This is a primary flight control bearings and a life threatening problem. I feel an emergency AD should be given, for all aircraft over 10 years old for inspection of all flight control bearings.

## Synopsis

Repair station owner reported during disassembly for paint, all flight control pivot point bearings either fell apart when removed from aircraft or were completely frozen when further inspection was performed.

## Time / Day

Date : 202304

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : RV-10

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Repair

## Component : 1

Aircraft Component : Magneto/Distributor

Manufacturer : L/H

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Magneto/Distributor

Manufacturer : R/H

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Repair Facility

Reporter Organization : FBO

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

Experience.Maintenance.Technician : 15

ASRS Report Number.Accession Number : 1998950

Human Factors : Human-Machine Interface

Human Factors : Confusion  
Human Factors : Troubleshooting  
Human Factors : Situational Awareness

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

The aircraft had a propeller strike [over 5 years ago] about 1,100 hours time since new. The engine was removed and sent to an aircraft engine shop for disassembly inspection and reassembly. The aircraft/engine was returned to service and operated for about three hundred hours on the magneto (6350) which then failed, the magneto was repaired/yellow tagged and returned to service. At that time the magneto adapter LW19096 did not disengage so the replacement of the magneto was routine. About 500 hours time in service, the (6393) magneto was removed for service bulletin. The LW19096 part disengaged from the magneto and the drive gear. We removed the LW19096 noticing that it did not match the picture, which should have been included bearing 67542. We then assumed we screwed up and searched the oil sump with camera, magnets, suction without any bearings or fragments found. We pulled the quick drain and used a camera to search inside, no joy. We pulled the oil screen, and no fragments were found. Finally, we cut the oil filter and again, found no metal. Frustrated, we pulled the other magneto and disengaged the LW19096 and found no bearing 67542. We have concluded that the engine shop removed the bearing for NDT (Non-Destructive Testing) and never replaced them; the bearings are press fit and must be removed with a puller. No 67542 bearings were on the new parts list in the logbook. The O540 and IO540 require bearings to support one end of the magneto drive gear. I am aware of one other instance where bearing 67542 has been omitted and the engine was full of metal fragments from the LW19096 was vibrating against the case.

## Synopsis

Technician reported the aircraft's engine was disassembled after magneto failure and it was found that the required magneto bearings had not been reinstalled after overhaul.

## Time / Day

Date : 202305

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : N

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

## Component : 1

Aircraft Component : Gear Pins

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Company Operations Manual

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Landing Gear

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1997883  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface  
Human Factors : Situational Awareness  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 2

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Maintenance : Lead Technician  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1997880  
Human Factors : Time Pressure  
Human Factors : Human-Machine Interface  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 3

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1997885  
Human Factors : Time Pressure  
Human Factors : Situational Awareness  
Human Factors : Confusion  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 4

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1997884  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface

Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Routine Inspection  
Result.General : Maintenance Action  
Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Lead assigned me and Person A to gear door checks on Aircraft X. We slugged the gear in prep for the test. I was on the ground while Person A and Inspector Person B went to the cockpit. I took off door locks, and at this time the locks were still on the gears. I cleared hydraulics, closed gear doors. Then informed by Person A that the slugs needed to be removed, to be in the correct configuration and then reinstalled. I put the slugs back on and informed the cockpit and Person A started the test. I was standing by the right gear and saw the actuator attempt to raise the gear, with it flexing slightly-at that point I realized the locks had been removed from the gear. I turned towards the nose and it had begun to retract. The aircraft had lowered and came to rest on the right hand door stand with the weight of the aircraft supported by the entry door resting on the door stand, it stayed this way for 30-45 seconds until the right entry door broke at the fitting and the entire nose hit the ground.

## Narrative: 2

On this day being the Crew Chief I was assigned the task of working 2 aircraft. Aircraft X was close to being completed. The only job left before we went outside to do an engine run leak check was to operate the gear doors with slugs on the gear. During this time I was going back and forth to Aircraft Y which had a engine fuel nozzle installation and due to manpower I had 3 probationary mechanics working it so I was more interested in keeping an eye on them. On Aircraft X I had 2 people undocking the aircraft so as soon as the landing gear job was complete we would exit the hangar to do the engine runs to finish this visit. Mechanic asked me if they should remove the gear locks and I told them they could because as soon as hydro was shut off we would be ready to roll.

## Narrative: 3

Lead assigned myself and Person C for the main landing gear door check with Inspector Person B. The job card calls for an operational test of the doors from the ground and if a bearing was reported migrated installing false targets and doing operational tests with false targets. Inspection suggested we do an operational check with false targets first, I made sure the gear pins were installed. We installed the false targets. I went to the cockpit with the Inspector. I started reading the paper work for the operational check with



false targets. I read that the gear doors had to be up, so I advised my ground man Person C that the targets had to be taken back off so we could raise the gear doors from the ground. Person A removed the targets. I pressured the hydraulic system. Person C raised the doors. With hydraulic pressure remaining on, I advised Person C to reinstall the targets to start the operation of the doors with targets. Still not knowing the gear pins were removed. After Person C informed me that the targets were installed I asked Person C if everything was clear. They informed me that it was. So me and the Inspector continued to complete the operational check. I selected the gear handle to up and told the Inspector what we had to look for. That is when the accident happened. Nothing but shock.

#### Narrative: 4

I was issued the undocking card, started removing protected covers and pitot covers on Aircraft X. I was moving ladders away from the aircraft I turned around and witnessed the nose gear collapse. It was very fortunate the gear collapsed slowly to a 45 degree angle, the forward entry door caught the stand and cushioned the fall and gave ample time for everyone to clear the aircraft safely. Then approximately 30 to 45 seconds later the entry door arm sheared and the aircraft dropped to the ground.

#### Synopsis

Technicians reported failure to follow procedures and communication issues caused an inadvertent nose landing gear retraction during operational checks following maintenance.

## Time / Day

Date : 202304

Local Time Of Day : 0001-0600

## Place

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

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 : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Work Cards

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

## Component : 1

Aircraft Component : Other Documentation

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

Qualification.Other

ASRS Report Number.Accession Number : 1994035

Human Factors : Confusion

Human Factors : Human-Machine Interface  
Human Factors : Time Pressure  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected.Other  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

I was completing the Blade Lube card and once it was completed, the work order had no active tasks in the work package. The Color X Bar was not present on the work package but no active tasks were present either. I looked into the Labor section of the Work Order and saw a task card was still active but unable to be completed. I approached my supervisor because I wasn't sure what I needed to do to fix this. My supervisor contacted another department and informed me that the card was an error and that planning had removed it. The Next day, I was informed that the aircraft was stopped in another City. The first thing I asked was if I needed to file a safety report. I was told that due to it being fixed and a paperwork issue that a safety report wasn't necessary. On Date, I was asked to attend a meeting about Aircraft X and was informed that this was a more significant paperwork issue and that I needed to file a safety report.

## Synopsis

Technician reported confusion over a Fan Blade Lubrication Task Card included in the initial overnight work package. After completing the Task Card, it was discovered to be no longer included in the work package and was intended to be deleted. The aircraft was later grounded at another station to make paperwork corrections.

## Time / Day

Date : 202203  
Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC  
Work Environment Factor : Poor Lighting  
Light : Daylight

## Aircraft

Reference : X  
Aircraft Operator : Personal  
Make Model Name : Skylane 182/RG Turbo Skylane/RG  
Operating Under FAR Part : Part 91  
Mission : Personal  
Flight Phase : Parked  
Maintenance Status.Maintenance Deferred : N  
Maintenance Status.Records Complete : Y  
Maintenance Status.Released For Service : Y  
Maintenance Status.Required / Correct Doc On Board : Y  
Maintenance Status.Maintenance Type : Scheduled Maintenance  
Maintenance Status.Maintenance Items Involved : Inspection

## Component

Aircraft Component : Fuselage Skin  
Aircraft Reference : X  
Problem : Malfunctioning  
Problem : Improperly Operated

## Person : 1

Location Of Person.Aircraft : X  
Reporter Organization : Personal  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Inspection Authority  
Qualification.Maintenance : Powerplant  
Experience.Maintenance.Inspector : 5  
Experience.Maintenance.Technician : 20  
ASRS Report Number.Accession Number : 1993158  
Human Factors : Human-Machine Interface  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Other

## Person : 2

Reporter Organization : Personal  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
Experience.Maintenance.Technician : 3  
ASRS Report Number.Accession Number : 1993409  
Human Factors : Situational Awareness  
Human Factors : Human-Machine Interface  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Other

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Routine Inspection  
When Detected : Pre-flight  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Aircraft

## Narrative: 1

During a pre-flight, the crack discovered and documented in the previous annual inspection records was too large and unairworthy. In the submitted maintenance report, information from the company engineers stated a crack in the skin was OK as long as there was no damage to internal structure and no fasteners were damaged.

## Narrative: 2

Upon pre-flight inspection a previously reported crack on the RH Flap Inboard Leading Edge was cause for concern to the pilot performing the pre-flight. The crack was less than 2 inches in length. The crack was not in any structural members nor did the crack affect any fasteners. Spoke with Company Engineers and they reported to me that if the crack does not exceed 2 inches in length, protrude through any fasteners, or affect internal structures, it is considered airworthy. Maintenance report was filed.

## Synopsis

Technicians reported a previously documented crack on the RH Flap Inboard Leading Edge had elongated, and was now non-airworthy. The aircraft was removed from service. This was found on a pilot's pre-flight inspection.

## Time / Day

Date : 202304

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

ATC / Advisory.Ramp : ZZZ

Make Model Name : Commercial Fixed Wing

Flight Phase : Parked

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Repair

Maintenance Status.Maintenance Items Involved : Installation

## Person

Location Of Person : Company

Reporter Organization : Air Carrier

Function.Maintenance : Quality Assurance / Audit

ASRS Report Number.Accession Number : 1993105

Human Factors : Situational Awareness

Human Factors : Confusion

## Events

Anomaly.Conflict : Ground Conflict, Critical

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Ground Event / Encounter : Other / Unknown

Detector.Person : Maintenance

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Manuals

Contributing Factors / Situations : Procedure

Primary Problem : Manuals

## Narrative: 1

Management has been notified that a maintenance pick up truck carrying a tire trailer has been spotted driven under an aircraft nose at gate. When looking to the recorded video management noticed that the light on the top of the truck was extremely close to the aircraft nose and almost caused a very expensive damage. Maintenance Technician was asked for the reason he adopted such a reckless behavior. Their answer was that they needed to park the tire trailer that was hooked to the back of the truck and the regular back where it has been always parked right next to the aircraft and he didn't see a safer or different way to do so. A documented discussion was held with the Maintenance Technician driving the truck. They were also advised that any future similar incident may have more

serious actions taken. A crew meeting took place after the incident. Maintenance Technicians were shown pictures and were informed about the severity of such actions and this behavior is not allowed under company general procedures manual.

## Synopsis

Maintenance Manager reported a Maintenance Technician drove a truck under the nose of a parked aircraft in violation of company procedure.

## Time / Day

Date : 202304

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Operating Under FAR Part : Part 121

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

## Component

Aircraft Component : Oxygen System/Crew

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Gate / Ramp / Line

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1992470

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

Human Factors : Confusion

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance

Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1



After servicing the crew oxygen bottle on Aircraft X, I failed to fully open the valve on the bottle. It is my belief that I encountered a resistance partway through turning the knob, and mistakenly believed it to be open fully. I then backed the knob off 1/4-turn and safetied it per the AMM (Aircraft Maintenance Manual). Following this, I proceeded to test the system in the flight compartment. I neglected to properly read the pressure gauge, and in doing so failed to notice that the pressure drop exceeded limits by a considerable margin. The error was discovered and corrected by another Mechanic later on Day 0 at about XA:00 during an operations check. This Mechanic then reached out to me, and informed me of what he had found in a constructive and helpful manner. The condition caused by this error is one that could have caused substantial risk to all onboard in the event of decompression or similar incidents, if it had not been found. I must more carefully read the instructions laid out in the AMM, and take steps to be more positive that I am putting aircraft equipment into the condition intended and necessary.

## Synopsis

B737-800 Technician reported failing to fully open the valve on the crew oxygen bottle and also improperly read the pressure gauge during a system check per the Aircraft Maintenance Manual. Another Technician later discovered the error during an operations check. The discrepancy was addressed and fixed.

## Time / Day

Date : 202303

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Route In Use : Vectors

## Component : 1

Aircraft Component : Turbine Engine

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Component : 2

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Component : 3

Aircraft Component : Company Operations Manual

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1991185

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Situational Awareness  
Human Factors : Time Pressure  
Human Factors : Troubleshooting  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection  
Result.General : Maintenance Action  
Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

Aircraft X had an engine failure that could have been prevented. An vibration was observed by the flight crew which went onto monitor as a result. When set down into ZZZ for troubleshooting, the item was rewritten back up but at a higher vibration amount than when it was placed on monitor. Engineering reviewed the data and determined that it was an indication issue and had the incorrect Technical Service Manual (TSM) procedure dictated to be done and regardless replace a vibration sensor, versus the correct TSM procedure. This dictation by engineering with maintenance lead to local maintenance to use the incorrect TSM at their request. The engine was placed back into service with just an idle run and nobody questioned to have a vibration survey completed to inspect for correction. The aircraft was dispatched with every flight afterwards reaching high vibrations and being signed off even though the indicated level was above the authority limit. Maintenance never issued a maintenance discrepancy to keep the aircraft at maintenance bases and the aircraft was flown to ZZZZ over water to its failure on departure from that station. The Company had created a culture where engineering will determine what needs to be done and cause deviations in correct and effective troubleshooting while maintenance will not challenge nor will the technicians involved. This adds to the reasons as to why the company has had a high engine fail rate. The propulsion engineers willfully dictate what needs to be done and it creates these deviations on required troubleshooting by licensed mechanics. There is too much office troubleshooting being accomplished without actually relying on correct or effective troubleshooting and it has created a motive to replace parts until the item is fixed. The company needs to stop relying on engineering as the main source of troubleshooting as this creates deviations plus actions placed into the web based system that are not the correct way to troubleshoot nor repair aircraft. Engineering is abusing technicians A&Ps and the company willfully knows it. This type of culture needs to be corrected and halted as well as place the

technicians back in control of their licenses and not engineers who are allowed to not create Engineering Authorizations (EAs) for accountability.

## Synopsis

A319 Technician reported incorrect trouble shooting and recording of data led to an engine failure on take-off. Communications between maintenance and engineering caused critical engine data to not be reviewed and reported to appropriate personnel, allowing the engine to remain in service without proper inspections and maintenance action.

## Time / Day

Date : 202303

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : FBO

Make Model Name : Piper Aircraft Corp Undifferentiated or Other Model

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Repair

## Component

Aircraft Component : Fuel

Aircraft Reference : X

Problem : Malfunctioning

## Person

Location Of Person : Repair Facility

Reporter Organization : FBO

Function.Maintenance : Technician

Function.Maintenance : Inspector

Qualification.Maintenance : Inspection Authority

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Repairman

Experience.Maintenance.Lead Technician : 36

Experience.Maintenance.Repairman : 12

ASRS Report Number.Accession Number : 1990213

Human Factors : Troubleshooting

Human Factors : Confusion  
Analyst Callback : Attempted

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

## Narrative: 1

Increased frequency of maintenance required on carburetors and fuel injector systems due to suspected cadmium particulate matter being found in float bowls, fuel injector nozzles, fuel screens and fuel jets. This impacts fuel flow and metering, impacting engine performance due to restriction of fuel flow. This phenomenon was observed on aircraft during unscheduled maintenance due to complaints of loss of power and also during routine scheduled maintenance. Particulate accumulation also found in check valves, auxiliary fuel pumps and mechanical engine pumps. Clumps and screen obstruction observed. This has been observed over the past four months, since aircraft started using UL94 (Unleaded 94 Octane). The exact source of the cadmium is not definitively determined at this time. We suspect the cadmium is held in suspension in the fuel and in addition to accumulating and clogging the fuel system some particles are entering the combustion chamber with unknown impacts on cylinders, valves and exhaust systems. A simple experiment was conducted. Aviation cadmium bolts were placed in 100LL and UL94 for a few hours. The bolts in 100LL remain intact with no change. The bolts in UL94 showed flaking with particles suspended in the fuel sparkling. Cleaning of all fuel parts in the fuel systems clears the problem but it reappears. We are concerned since we have limited experience with UL94 and have not seen anything like this in our careers that total over 50 years together as A&P and IA.

## Synopsis

Repair station Technician reported issues with UL94 aviation fuel dissolving cadmium and holding it in suspension, causing clogging of fuel system components. Technician stated pilots are reporting loss of engine power.

## Time / Day

Date : 202301

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : B777-200  
Crew Size.Number Of Crew : 2  
Operating Under FAR Part : Part 121  
Flight Plan : IFR  
Mission : Passenger  
Flight Phase : Parked

## Component : 1

Aircraft Component : Fan Blade  
Aircraft Reference : X  
Problem : Improperly Operated

## Component : 2

Aircraft Component : Aircraft Logbook(s)  
Aircraft Reference : X  
Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1989515  
Human Factors : Human-Machine Interface  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Aircraft X request was made to remove #1 Engine Fan blades, it was determined the blades were removed from #2 Engine.

## Synopsis

Technician reported replacing fan blades on the incorrect engine of a B777.



## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A320

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

## Component : 1

Aircraft Component : FCC (Flight Control Computer)

Aircraft Reference : X

Problem : Malfunctioning

## Component : 2

Aircraft Component : Other Documentation

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 1989510

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Confusion

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Other

## Person : 2

Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1989517  
Human Factors : Time Pressure  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Other

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Aircraft X came in with a Flight Control Data Concentrator (FCDC) # 1 Fail Message. I looked at the Illustrated Parts Catalog (IPC) and could not verify that the part number that was going to be robbed was the correct part number. Called the Company parts support line number, and after a half hour without finding anything out with the part number, I turned it over to my Supervisor. They were on the phone for 1 hour with parts and they came to agreement that it was the correct part number and told us to install it. We installed the part and tested per the Maintenance Manual (MM). All tests passed.

## Narrative: 2

We were told we were going to rob the Flight Control Data Concentrator (FCDC) from an aircraft at the hangar which had the wrong part number. (Not the correct part). We were told to take that part back to its original aircraft and rob the other FCDC which was also the wrong part. We spent 30 minutes on the phone with support, which was no help. The Supervisor spent 1 hour on phone with Parts and they verified the part's effectiveness to Illustrated Parts Catalog (IPC) item per guidance. We were told to install that part. We then installed the part reference Aircraft Maintenance Manual (AMM). All Tests Passed.

## Synopsis

A320 technicians reported a part was robbed from an aircraft and installed on another aircraft, but it was the wrong part number for that aircraft.

## Time / Day

Date : 202303

Local Time Of Day : 0001-0600

## Place

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Work Environment Factor : Temperature - Extreme

Work Environment Factor : Poor Lighting

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B767-300 and 300 ER

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

Route In Use : Vectors

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Inspection

## Component

Aircraft Component : Main Gear Wheel

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Person : 1

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 1988684

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Confusion

Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Person : 2

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1988685  
Human Factors : Troubleshooting  
Human Factors : Training / Qualification  
Human Factors : Situational Awareness  
Human Factors : Confusion  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
Result.General : Maintenance Action  
Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

I was tasked, along with a team of 4 total, to complete a reasonable amount of work on Aircraft X a Boeing 767 Aircraft. We got our work around XA30 as we usually did and the 4 of us grouped together to plan out who was to be working as a team and on what tasks. Person A and I were a pair and Person B and Person C were the other pair. Person A and I had worked on the number one engine that evening as our main tasks. Throughout the night other than brief interactions the two teams did not interact too much. More towards the later hours of the morning, Person A and I had come to the conclusion of our work. During our final clean up and second checks it came to my attention that, due to a leak in the number one tire, the other team wanted to change the tire. I offered my helping hand to have the job go smoother, because I was available and did not want to simply abandon these guys in the cold alone while i returned to the office to rest while they worked. Firstly, everyone set off quickly to acquire all the different tools and parts that are needed to do the change. I believe I was in the bathroom when everyone broke and so proceeded to run back to the office where the tires are kept to aid in its acquisition given how heavy they are. I helped Person B get the tire from the container and rolled it over onto the tire

jack cart which Person C had already positioned and connected to the truck. I got in the vehicle with him and we drove back over to the plane. Once we got there I exited and dropped the ramp to roll the wheel off of the cart. Person C and I rolled it together over to the gear and leaned it up on the number two tire so it would be out of the way, he then proceeded to disconnect the cart, move it together over to the gear and position the jack, Person B worked the tanks while I worked the jack and in little time we had the plane jacked up and ready to go. I then stepped away to start signing off and reviewing the work that I had done earlier that evening. When I returned to the tire job, since I already had my iPad out, I offered to write up the tire discrepancy for Person B after asking if they had done so already. I wrote it up for them and then proceeded to fill out the component replacement paperwork for them since it is a bit of a hassle. By the time I was done with that they were ready to take the old tire off and so I wheeled over the tire raiser cart jack piece of equipment and positioned it under the tire. I then stood by passing time and awaited their go ahead to jack it up to cradle the tire. They removed the tire while I moved the cradle back off the axle. Once I cleared it was safe I dropped the cradle down to get the tire on the ground. I rolled the tire away over and leaned it up against the truck. I do not remember if I aided in rolling or positioning the new tire over but I did man the wheel cradle jack again. I forgot who but someone positioned the new wheel onto the cradle jack and when everyone was ready I jacked it up and positioned the tire and worked with them to get the proper height on the jack so that the tire would go onto the axle. Once I saw that it was on, I lowered the jack, moved it out of the way and got myself out of the way so that they could work. At this time, I stepped away to the old tire for a bit to see and watch Person C deflate the old tire and to briefly banter with him while we waited. Sometime later I noticed that Person B was having a hard time with the tire and I commented that I did not believe it was seated all the way or properly on the axle. When it was decided, by them, they wanted to take the tire all the way off and try again, I got the tire cradle jack again and positioned it just as I had done previously, I got the cradle up, We took the tire off and I got it out of the way while they investigated the axle. I noticed that they found the old tire's bearing still in and on the axle. I briefly took note of them removing it, but did not really pay attention to it. My attention was on my phone while I was waiting for them to say they were ready to put the new tire back on. When they said they were ready, I positioned the new tire just as I had done before and aided them in getting it back on the axle. My next steps mirrored exactly what I had done previously. I lowered the cradle and got it out of the way and then stepped aside myself. From this point forward I was more of a floater just hanging out until the job was done or helping clean the odd thing here or there. At one point I did assist with holding the torque wrench in place as they had made a commotion about it not working properly or having a hard time with it. I held it in place briefly. It seemed to work fine and then I stepped away again to help clean up dirty rags around until everything was done with. At the very end I **did help Person B put the cap back on the tire as it's a pain to do alone to fish that bolt** back through the other cap. Afterwards, I went with Person C to return the torque wrench and tire change kit. When we got back to the office I proceeded to go about my own business. I was shocked and mortified to find out a couple days later when I was informed that the tire had experienced a rather catastrophic failure. Over the past few days it has come to my attention that a spacer was left out on the inner portion of the axle. My heart dropped as I remembered the issue Person B had had getting the tire on and that they had removed the old bearing. I immediately came to the conclusion that the spacer must have accidentally been removed as well and put to the side. I never really saw the bearing after the brief moment they took it out and thought nothing of it at the time. My experience with the 767 tire change is limited having only really done it maybe once before this. I was unaware of the fact that that spacer even existed. I came to find out later that it is mentioned specifically in the manual. I assumed that the manual had been used as you need it to get the torque values. Since I was only helping in a supportive

logistical role I did not have the reference open myself and just tried to stay out of the way when I was not needed.

## Narrative: 2

Task - remove and replace number 1 Tire and Wheel assembly. 767-300. Aircraft X. The proper tooling and MLG (Main Landing Gear) tire change kit were acquired. During the service check, that particular tire pressure was low. Upon further troubleshooting the valve stem was determined to be leaking. The valve stem was tightened into the wheel bringing the air leak to almost a complete stop. A leak check was performed to determine this. Against my judgement it was determined by one tech out of four that he wanted to remove and replace the tire. While working the remove and replace task some difficulty was encountered trying to install the tire on the axle. The tire and wheel assembly would not slide completely on the axle. Upon further investigation, it was discovered that the original inner wheel bearing and seal remained on the axle. When the original wheel bearing and seal were removed the inner wheel spacer obviously went with it unnoticed. This assembly of parts was placed on top of the old wheel and tire assembly for further inspection. After inspecting the new wheel and tire assembly for the inner wheel bearing and determining it was complete, then returning to the old tire wheel assembly only to find the old bearings were reinstalled in the old tire and capped up by another technician. So then going back to the new tire wheel assembly we then continued on with the assembling of the new tire, wheel and it slid on the axle all the way properly. After referencing the AMM for torque value, the axle nut was installed and torqued with the proper tooling. Proper torquing took two attempts because of the special tooling required reset twice. The preload and proper torque was achieved and the gland nut locking bolts were installed. Required amount of threads looked correct. Two. This having been my first 767 MLG tire replacement I felt confident all was in order. I also felt pressure that all tasks must be done in a timely manner and should not take triple time.

## Synopsis

Technicians reported communication and coordination problems led to not installing a brake axle spacer when replacing a main wheel tire assembly. The tire and wheel assembly failed catastrophically in service.

## Time / Day

Date : 202303

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : No Aircraft

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Parts / Stores Personnel

ASRS Report Number.Accession Number : 1988172

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Ground Personnel

## Events

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Ground Personnel

When Detected : Routine Inspection

Result.Flight Crew : Overcame Equipment Problem

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

## Narrative: 1

Was checking in COMAT (Company Material). When opened a box which had no paperwork and noticed it was a hazardous item shipped without any paperwork or Hazmat labels. When I researched the part, I noticed the last transaction on the part was ZZZ shipping it to ZZZ1. It never shows receipt in ZZZ1, therefore, there was no possible way shipping paperwork was produced for return shipment. Fuel fumes were noticeable when opening container. No clerks [acknowledgement] in ZZZ1 and no field-trip requested. Suggestions: Request clerks to go on field trips to Class 4 stations to perform shipping functions.

## Synopsis

Air carrier maintenance stores personnel reported receiving a COMAT parcel without required Hazmat documents or labels. The shipper failed to complete required Hazmat documents.



## Time / Day

Date : 202303

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : Commercial Fixed Wing  
Operating Under FAR Part : Part 121  
Mission : Cargo / Freight / Delivery  
Flight Phase : Parked

## Component : 1

Aircraft Component : Turbine Engine Thrust Reverser  
Aircraft Reference : X  
Problem : Malfunctioning

## Component : 2

Aircraft Component : EICAS/EAD/ECAM  
Aircraft Reference : X  
Problem : Malfunctioning

## Person

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1988166  
Human Factors : Human-Machine Interface  
Human Factors : Situational Awareness  
Human Factors : Troubleshooting  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Maintenance  
When Detected : Aircraft In Service At Gate

When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : MEL  
Contributing Factors / Situations : Procedure  
Primary Problem : MEL

## Narrative: 1

An amber U/L(unlocked) was displayed in the #2 engine pressure ratio gauge on the engine display. All Four of the locking thrust reverser actuators were verified to be fully latched into the stowed and locked position. After notifying Maintenance, I worked with another Mechanic to lock out the #2 engine per maintenance procedures (aka MEL). The control number for the deferral was then requested from Maintenance. Note: The MEL procedures paragraph lists the thrust reverser related cockpit indications which would prevent dispatch when the engine is locked in the stowed position using this MEL. The indication is not prohibited here.

## Synopsis

Technician reported ambiguity in MEL process during trouble shooting of a thrust reverser unlocked indication. The MEL did not specifically prohibit dispatch with an unlocked indication present with the thrust reverser locked out.

## Time / Day

Date : 202303

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Repair

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Work Cards

## Component

Aircraft Component : Oxygen System/Pax

Aircraft Reference : X

Problem : Malfunctioning

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

Qualification.Other

ASRS Report Number.Accession Number : 1986432

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Time Pressure  
Human Factors : Troubleshooting  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : MEL  
Contributing Factors / Situations : Procedure  
Primary Problem : Aircraft

## Narrative: 1

Aircraft X had a check card that was deferred per procedures on Day 0 due to limited ground time. The work card, was to accomplish the operational test of the passenger oxygen system. On Day 1 I received a call stating that they had been assigned the work card and had numerous faults while performing the card which affected approximately 67 passenger seats as well as the overhead Flight Attendant crew rest and a couple of Flight Attendant jump seats. I informed the Maintenance Operations Manager of the issue and said that we have the option to maintenance ferry the aircraft to another maintenance facility or we could apply MEL 35-XX-XX and block off the affected seats that had failed the test of the oxygen system. The Maintenance Operations Manager said that they wanted them to continue to follow the fault isolation procedures and see if we could repair the system. I continued to work with the mechanics via phone during the duration of my shift and then turned it over to the night shift. The next morning I arrived at work and asked what the status of the troubleshooting was and was told they had isolated the fault. The decision was made by management to allow the station to defer and work the card because it still had time left to accomplish the card and let the aircraft continue in revenue service with known faults with the passenger oxygen system.

## Synopsis

Maintenance Controller reported non compliance with SOP and MEL procedures allowed an aircraft to fly in revenue service with known, inoperative passenger oxygen system components.

## Time / Day

Date : 202303

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

## Component

Aircraft Component : Turbine Reverser

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1985489

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Detector.Person : Maintenance

Detector.Person : Flight Crew

Were Passengers Involved In Event : N

When Detected : Routine Inspection

When Detected : Pre-flight

When Detected : Aircraft In Service At Gate

Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure  
Primary Problem : Aircraft

### Narrative: 1

Assigned to Aircraft X for bolts that were found lying in the bottom of the reverser when opened. These two bolts should have been installed with two self locking barrel nuts that were not found in the reverser. So, it appears that the bolts were never tightened into the lock nuts as if they were then they would not have fallen out. When removing the inboard sleeve for #2 engine to repair the wear damage from the loose ring, found that there were two (upper and lower) of the three bushings missing from the aft rod end of the reverser actuators. Bolts not tightened and bushings missing, why?

### Synopsis

Technician reported finding missing bushings and barrel nuts on a thrust reverser sleeve that was removed for repair.

## Time / Day

Date : 202303

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777 Undifferentiated or Other Model

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

## Component : 1

Aircraft Component : Wheels/Tires/Brakes

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Other Documentation

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1984183

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

Human Factors : Time Pressure

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Detector.Person : Maintenance

Were Passengers Involved In Event : N

When Detected : Routine Inspection

When Detected : Aircraft In Service At Gate

Result.General : Flight Cancelled / Delayed

Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

During ETOPS inspection, found MLG Wheel #3 Axle with brake sleeve missing. Brake sleeve PN 161W1211-1 was not installed during the last wheel brake replacement. Technician must follow step by step the AMM instructions during wheel brake replacement and avoid distractions.

## Synopsis

Technician reported during ETOPS PDC inspection of a B777 aircraft, found an MLG Wheel #3 Axle with brake sleeve missing.



## Time / Day

Date : 202303

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Make Model Name : No Aircraft

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Taxi

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Parts / Stores Personnel

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1982140

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Ground Personnel

## Events

Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance

Detector.Person : Ground Personnel

When Detected : Routine Inspection

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

A must ride box appeared in stock records at ZZZ on Day 0. In the box was a serviceable actuator XX-XXXX-X-XXXX. The paperwork clearly show that the part was Hazardous Material and was not declared properly for shipment. There was not shippers decoration for Hazardous Material, no Hazardous makings on the outside of the box. This part as shipped from ZZZ1 to ZZZ via Aircraft X per the must ride label without using the hazardous materials tracking system. The part was removed from Aircraft Y on Day 1, and

then proceeded for repair order XXXXXX by Person A on Day 2. Person A appears to be a Stores Supervisor. I do not know who boxed this Hazardous part and offer for shipment on air carrier without using the hazardous materials tracking system.

## Synopsis

Air carrier Maintenance Stores Supervisor reported a Hazmat box arrived for shipment with incomplete documentation, missing required Hazmat labels, and bypassed the Hazmat processing system. The Hazmat box was removed for correction.

## Time / Day

Date : 202303

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Mission : Passenger

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Lead Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1981467

Human Factors : Other / Unknown

Human Factors : Workload

Human Factors : Distraction

## Events

Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance

Detector.Person : Ground Personnel

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

I had 2 parts connected together 1 part was hazmat and 1 part was not hazmat, i may have confused the 2 parts in the process of shipping. I may have incorrectly ship the 1 part that was hazmat not hazmat and the part that was not hazmat [as] hazmat Next ship the as one part instead of separating them

## Synopsis

Air carrier maintenance technician reported inadvertently shipping a set of aircraft parts without a required hazmat label.

## Time / Day

Date : 202302

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

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

Route In Use : Vectors

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Work Cards

## Component

Aircraft Component : Turbine Engine

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Other / Unknown

ASRS Report Number.Accession Number : 1978585

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Human-Machine Interface

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Other

## Person : 2

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1978400  
Human Factors : Workload  
Human Factors : Time Pressure  
Human Factors : Situational Awareness  
Human Factors : Fatigue  
Human Factors : Confusion  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Aircraft X was scheduled for a Right Engine Change in our Company Maintenance Base in ZZZ. The purpose of this Engine Change was to comply with the following tasks - Objective 1 - R&R STAGE 1 TURBINE DISK, LIFE LIMIT, Objective 3 - R&R STAGE 1 AFT COOLING PLATE, LIFE LIMIT, and Objective 2 - R&R STAGE 2 TURBINE DISK, LIFE LIMIT. Per Company's direction, these tasks must be low in cycle count to be changed. Objective 1 and Objective 2 were at 7 cycles at the start of the flying, Objective 3 was at 4 cycles at the start of the flying day. Maintenance for this Engine Change was scheduled over the course of three days (also referred to as a CML (Continuous Maintenance Line) or Weekend Down). The plane was scheduled to be inducted into Maintenance at XA:45 on the first day, and be released at XB:00 on the third day. This was extended 1 day longer due to needed Maintenance Actions within the Maintenance Hanger. The plane was noted to be completed on Date. Maintenance Personnel sent the corresponding work order to their inspector on duty, the Inspector cleared the completed work order and scanned it into the database for planning review and closure of said work order. I closed the work order and carried on with the duties assigned to me by my manager. The aircraft was released back into operation by Maintenance Control and was dispatched for 6 flights within Company's market. The aircraft would then park in a Company Contract Maintenance base in ZZZ1 for the night with Objective 3, 2 cycles over its limit. The

following day, Maintenance Control noticed that Objective 3 was showing -2 on the maintenance due report and questioned Maintenance Planning. Person A sent a copy of the page showing the negative with a message. The Maintenance Planner on Duty then replied 10 minutes later. Person B then sent an email to the Company Power Plant Team as well as the Records Department questioning this negative cycle count. Come to find out, ZZZ Maintenance changed the wrong Engine on the aircraft, and the Engine that flew the 6 cycles was indeed overflown by 2 cycles. This was discovered on Date 1. The plane was grounded and corrective action was taken by ZZZ1 Maintenance. Several things can be corrected here, first and foremost, if the correct engine was changed, we would have closed the work order and expected Aircraft Records to update the tasks that were showing due. This is because instead of scheduling the industrial tasks, we at Company scheduled a pre-made Engine Change Job Card. This does not take compliance for the tasks, but for an Engine Change itself. In this situation, a good change could be for Maintenance Personnel to write a Work Card requesting Maintenance Planning to take compliance for the tasks showing due or the tasks showing due be added to the work order with the Engine Change Job Card. But in this situation, the wrong engine was changed, therefore we would have still been overflown because we would have been taking compliance for the wrong engine. It is normal to let the task fly until Aircraft Records updates the information because we see that the engine change was signed off. This is for NLG, MLG, and Engine Changes. This is a very lax system, and the one fact no one saw coming hit it resulted in an overfly. No one would have imagined that ZZZ Maintenance would change the wrong engine, everyone assumes that the procedure down line would fall into place and everything would be taken care of accordingly. Also, [the computer system] updates Hours and Cycles on our Maintenance Due Reports and [spreadsheet] once a day, that is in the early morning before flying has occurred. Therefore all day those tasks were doing positive until the update the following morning where it showed negative. The engine is well overflown at the point, but the [spreadsheet] is still showing 4, and any Maintenance Due Report at this time would also show 4 in the cycle count section.

## Narrative: 2

On Date, Aircraft X came in for a RH Engine Change. While positioning equipment that night I misread the position on the job card as LEFT. There was a heavy weekend coming up and I was hoping to turn the engine quickly to free up resources for the weekend. In my attempt to get a jump start on the change I did not verify S/N of the Engine to be removed and put the S/N off the job card on the Supplement. The result is that the LEFT Engine was changed instead of the RIGHT. This was my second engine change unassisted as a Crew Chief and I was focused on the actual change procedure. I also was under the impression that a recently repaired LH Engine was the one to be used, although I am not sure where that assumption came from. I should've slowed down and verified the S/N on the data tag against the job card and not just use the S/N on the Job Card. Moving forward, I should also limit the number of days in a row I am working to prevent burnout or fatigue.

## Synopsis

Maintenance Planner and Crew Chief reported the wrong engine was replaced during a scheduled maintenance resulting in overflying an engine that required replacement due to time cycle restricted components having reached their service limit. The aircraft was removed from service to correct the discrepancies.

## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : B767-300 and 300 ER  
Crew Size.Number Of Crew : 2  
Operating Under FAR Part : Part 121  
Flight Plan : IFR  
Mission : Passenger  
Flight Phase : Initial Climb  
Route In Use : Vectors  
Maintenance Status.Maintenance Deferred : N  
Maintenance Status.Records Complete : Y  
Maintenance Status.Released For Service : Y  
Maintenance Status.Required / Correct Doc On Board : Y  
Maintenance Status.Maintenance Type : Unscheduled Maintenance  
Maintenance Status.Maintenance Items Involved : Testing  
Maintenance Status.Maintenance Items Involved : Inspection  
Maintenance Status.Maintenance Items Involved : Installation

## Component

Aircraft Component : Emergency Exit  
Aircraft Reference : X  
Problem : Malfunctioning

## Person : 1

Location Of Person.Aircraft : X  
Location In Aircraft : General Seating Area  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1978393

## Person : 2

Location Of Person.Aircraft : X  
Location In Aircraft : General Seating Area  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1978395

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.General : Maintenance Action  
Result.Flight Crew : Landed As Precaution  
Result.Flight Crew : Returned To Departure Airport  
Result.Flight Crew : Requested ATC Assistance / Clarification  
Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

## Narrative: 1

We were advised the R/H Aft Emergency Exit Door Seal leaked during flight and flight returned to ZZZ. We installed Door Seal ref AMM XX-XX-XX-XXX-XXX.

## Narrative: 2

[Report narrative contained no additional information.]

## Synopsis

Technicians reported an aircraft performed an air turn back after replacing the R/H Aft Emergency Exit Door Seal.



## Time / Day

Date : 202302

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

## Component

Aircraft Component : Leading Edge Flap

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1977944

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

Human Factors : Distraction

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance

Were Passengers Involved In Event : N

When Detected : Aircraft In Service At Gate

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

I was working on Aircraft X (ZZZ) and was given the task to reapply Sealant, reactivate leading edge flaps and slats and trailing edge flaps. During the reactivation process of the downlock pins. I forgot to remove the downlock pins from the leading edge standby drive shutoff valve. This was due because I was distracted, pressured, and the streamer was not visible enough. I completely miss the downlock pins and forgot to remove them. Was not aware, pressured, and distracted. Replace new streamers on the downlock pins.

## Synopsis

Technician reported failing to remove Leading Edge Flaps Lock Out Pins from the Standby Drive Shut Off Valve during the reactivation process.

## Time / Day

Date : 202210

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : N

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Repair

## Component

Aircraft Component : Electrical Wiring & Connectors

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1977007

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Detector.Person : Maintenance

Were Passengers Involved In Event : N

When Detected : Aircraft In Service At Gate  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Aircraft X is currently out of service in ZZZ for not being able to power the Battery Bus. During their troubleshooting they noted one of the P310 cards was held in place by a tie-wrap.

## Synopsis

B777 Technician reported during their troubleshooting they noted one of the P310 cards was held in place by a tie-wrap. Aircraft was out of service for maintenance.

## Time / Day

Date : 202302

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

## Component : 1

Aircraft Component : FCC (Flight Control Computer)

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Spoiler System

Aircraft Reference : X

Problem : Malfunctioning

## Component : 3

Aircraft Component : Electrical Wiring & Connectors

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person.Aircraft : X  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1976779  
Human Factors : Communication Breakdown  
Human Factors : Situational Awareness  
Human Factors : Troubleshooting  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Person : 2

Location Of Person.Aircraft : X  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1977331  
Human Factors : Situational Awareness  
Human Factors : Human-Machine Interface  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Taxi  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Flight Crew : Returned To Gate  
Result.Flight Crew : Requested ATC Assistance / Clarification  
Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : MEL  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

Aircraft X returned to Concourse with a write up for F/CTL Fault Spoiler #1 LEFT and RIGHT. We replaced SEC3 IAW AMM. No help! At this time it was determined that the spoilers would be placed on MEL. After a short period of time of shining a flashlight from the ground in the spoiler area to add light, I left to go to handle paperwork and start the MEL process. I have no Narrative as to why any of the events occurred as I was on the ground for a short period of time to help provide some light. Then returned to the office to do paperwork. I am unable to provide a narrative as to offer any suggestions as to avoiding recurrence of this event. Maybe 100% buy back would help in this situation.

## Narrative: 2

Aircraft X returned to Concourse with a write up for Flight Control Fault Spoiler #1 Left and Right. we replaced SEC 3 IAW AMM with no help. Placed Spoilers on MEL. During procedure for tie-wrapping and bagging cannon plugs, work lights (headlamp) became intermittent.

## Synopsis

Technicians reported communications issues and confusion when attempting to troubleshoot an aircraft on a return to gate for F/CTL FAULT Spoiler #1 LEFT and RIGHT ECAM message.

## Time / Day

Date : 202302

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 MAX Series Undifferentiated

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : N

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Repair

Maintenance Status.Maintenance Items Involved : Inspection

## Component : 1

Aircraft Component : Horizontal Stabilizer Trim

Aircraft Reference : X

Problem : Malfunctioning

## Component : 2

Aircraft Component : Longerons/Stringers

Aircraft Reference : X

Problem : Malfunctioning

## Component : 3

Aircraft Component : Company Operations Manual

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person : Gate / Ramp / Line

Reporter Organization : Air Carrier



Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1974977  
Human Factors : Human-Machine Interface  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 2

Location Of Person : Gate / Ramp / Line  
Reporter Organization : Air Carrier  
Function.Maintenance : Inspector  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1974981  
Human Factors : Training / Qualification  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 3

Location Of Person : Gate / Ramp / Line  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1974978  
Human Factors : Troubleshooting  
Human Factors : Training / Qualification  
Human Factors : Human-Machine Interface  
Human Factors : Communication Breakdown  
Human Factors : Situational Awareness  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Detector.Person : Maintenance  
When Detected : In-flight  
When Detected : Aircraft In Service At Gate  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Aircraft : Aircraft Damaged

#### Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Aircraft

#### Narrative: 1

Aircraft X was inbound into ZZZ and came in with a discrepancy that the Elevator Electric Trim Chain was making a slapping noise when trimming the elevator. Aircraft was taken out of service and remained overnight. I worked graveyard shift on overtime and got assigned to troubleshoot the issue with the slapping chain for the electric trim. I adjusted the lower and bottom control turnbuckles in reference to the Aircraft Maintenance Manual with no help. Troubleshot the issue some more and found that the chain was still really loose. I adjusted the spool bolts by turning the nuts less than 1/4-inch. This fixed the issue and the chain was in limits per the Maintenance Manual. The technicians that initially found the issue that the chain was loose found that the chain had been rubbing on a frame in the pedestal. Talking to Management, it was determined that the damage wasn't that bad so the Management team edited the original write-up and deleted the pictures when I went to sign the original write-up off. There was no write-up in Maintenance saying there was any damage. I signed the aircraft off and Aircraft X was returned to service. Forty five minutes later the Inspector that performed my RII (Required Inspection Item) function, Person A, determined the Upper Turnbuckle Rod End was bent after they had already signed the aircraft off as being airworthy. They determined the Rod End was bent because they went and looked at other MAX aircraft. I ordered a new Rod End and I continued to be on shift. The Rod End came in at XF:00. I installed the new serviceable Rod End and rigged the Rod End in reference to Maintenance Manual. Inspector proceeds to tell me that they rewrote the damage up because they were accusing me of deleting the write-up and removing the pictures of the damage, which I can't do but Management can. Aircraft X goes back out of service and is still in ZZZ, has never flown since the initial squawk. I feel like I did nothing wrong and am getting accused of things I did that never happened and as far as the Rod End being bent. I looked at other aircraft and it didn't look bent to me but it was bent. The Inspector has the final say and they didn't see it either because they released the aircraft back into service. The aircraft is still here in ZZZ getting the Elevator Trim Chain replaced and the damage blended out so the aircraft hasn't flown since the initial discrepancy. Get inspectors trained on the aircraft because it's obvious [the] Inspector didn't know what they were looking for because why did they initially sign it off. Inspection is the final say.

#### Narrative: 2

On Day 0, I was scheduled the duty of RII (Required Inspection Item) buyback for Aircraft X inbound write-up, "Trim wheel makes loud noises while trimming all places." At the beginning of the shift I began looking into the discrepancy. While reviewing the write-up, I saw 4 total pictures where AMT B shows they discovered the Stab Trim Control Chain being very loose. Two of the photos showed a zoomed in view of what appeared to be structural damage where the chain had worn grooves into the structure as a result of it being loose. Shortly after the beginning of the shift, my Supervisor informed me that the decision was to not work that aircraft on the overnight shift. At around XA:00, I received a phone call from the Lead that they were ready for inspection buyback for the chain adjustment. I had explained that I was told it wasn't being worked, otherwise I would have been there from the start of the task, but I would go and be able to check the adjustment. While looking in the Forward EE Bay, I found that the upper turnbuckle had a bent Rod End. When I talked to the Mechanic that did the adjustment AMT A, I asked if they saw the bent Rod End. They said they had originally thought it was bent also, but had

compared it to another aircraft and that it was "supposed to be that way." AMT A is a well known knowledgeable Mechanic so I believed they had done as they said so I went ahead and signed off the chain adjustment since that in itself was correct and I wrongly made the decision to WAIT on making a write-up about the Rod End until I had done more research and verified myself. Also while in the EE I searched for the suspected damage that I had seen earlier, which I did not find. After not seeing the damage, I decided to review the photos again to help me locate where the photo was taken. At this point I find in tracking system that TWO out of the four photos have been removed from the discrepancy, and no write-ups have been made that addressed the suspected damage. I asked the two mechanics if they knew what happened to the missing photos. Their response was NO. I asked if they deleted the photos. Their response was NO, and that [the] tracking system did not give the mechanics the ability to remove photos. The mechanics acknowledged that there were other photos attached but did not know what happened to them. I asked AMT B where the suspected damage was located, and they explained it could only be seen from the cockpit behind the pedestal panels that were already re-installed, but that the damage "looked worse than it really was in the pictures, and that it was only paint." At this point I wrongly thought that I would be outside of my scope of inspection to have the mechanics re-open the panels for what they say was "only paint." So at this point the adjustment is signed off because the tensions showed to be within limits. The plane was released to service due to the Lead not knowing the Rod End was found bad. I should have made a more timely write-up for the Rod End so that the work package wouldn't be closed. I informed them that the Rod End was found to be bad and that I would be creating a new work package write-up to replace the Upper Turnbuckle Rod End. The aircraft becomes AOG for the turnbuckle. When the day shift Supervisor comes in, I inform them of everything above including the missing photos, and my suspicion on if there is damage I saw in the photos. They explained I was wrong about staying within my scope, and that if I suspect damage that we should get the panels back open and verify. After opening the panels we found the damage was more than "paint" - [it] was two grooves in the structure as a result of the chain riding on the structure. The damage was 0.100 inches width with a depth of 0.050 inches. In conclusion, although I made the write-ups in the end, I should have made the turnbuckle write-up as soon as I found it, regardless of whether there was uncertainty on if it was correct or not. Regarding the suspected damage, I should have made the call immediately to remove the panels so I could verify if there was damage that I believe I saw in the missing photos. In the future I will immediately write up discrepancies and THEN investigate whether they are right or wrong. I will do this in order to prevent the work package being closed and released to service with a suspected discrepancy. As far as the suspected damage goes, I know now that any suspected damage should immediately be investigated and documented even if I believe it is outside of my scope. As Quality Control Inspector it is my job to investigate any suspected damage regardless of scope in order to provide a safe aircraft. SAFETY COMES BEFORE SCOPE!

### Narrative: 3

The day started that I got the gate call for Aircraft X for when pilot moves stab trim, it makes a weird sound. I went out to the plane and performed operations check of the stab trim. I called over another fellow Mechanic to move the stab trim as I looked from below to see what was making the noise. I found the chain for the stab trim was very loose and smacking around. I pulled the plane out of service and proceeded to investigate the problem areas. I opened up the side panels on the center console until I could see the chain and saw where the chain was rubbing on a piece of metal. I took pictures and submitted them into tracking system. I called Maintenance Control and updated them as the plane was getting moved over to the pad. After the plane was moved I went out there and found a support rod had safety wire loose and you could spin it freely. So I believed

that was the root of the problem. As the overnight shift was about to start I talked with the Lead to stay on the aircraft to get it fixed but we all thought since I wasn't MAX qualified, I could not work on it. So I was put on other aircraft for the night. As I completed my other aircraft I went to Aircraft X to check up on the progress and I saw that they were rigging the chain back to tension and they safe-tied the rod again. I was told the damage was good and I closed up the panels that I removed earlier in the day. Inspection came over and performed RII (Required Inspection Item) on the tension of the chain and I left the plane. Follow up on information provided before in the shift.

## Synopsis

B737 MAX technicians and Inspector reported there was a lack of compliance with procedures with the repair of an aircraft that had a discrepancy with the elevator trim. Damage had been discovered to structural components within the center pedestal and was misidentified to be within limits.

## Time / Day

Date : 202302

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft

Reference : X

Make Model Name : PC-12

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Test Flight / Demonstration

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Testing

## Component

Aircraft Component : Propeller Control

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Function.Maintenance : Technician

Function.Maintenance : Inspector

Qualification.Maintenance : Inspection Authority

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

Experience.Maintenance.Avionics : 23

Experience.Maintenance.Inspector : 10

Experience.Maintenance.Lead Technician : 8

Experience.Maintenance.Technician : 33

ASRS Report Number.Accession Number : 1974740

Human Factors : Human-Machine Interface

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

During engine rigging of an engine after an engine change on Aircraft X, the QFE factor from pressure altitude was not converted correctly and the torque limiter / Np, propeller RPM, were not set correctly. All indications during engine performance tests were normal in accordance with the Pilatus AMM (Aircraft Maintenance Manual) and no other discrepancies were noted. During the Part 91 test flight the pilot noted the torque and Np were indicating high on approach with power control lever to idle and the condition lever in flight idle. The pilot placed condition lever in ground idle position to safely manage torque and Np to land safely. Maintenance was notified upon arrival. Aircraft was never placed in service for Part 135 operations.

## Synopsis

PC-12 Inspector reported the engine was improperly rigged after an engine change. During a post-maintenance test flight, the torque and propeller RPM was improperly high and the pilot notified Maintenance upon arrival.

## Time / Day

Date : 202302

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Route In Use : Vectors

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : N

## Component

Aircraft Component : INS / IRS / IRU

Manufacturer : ADIRU R/H

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

Qualification.Other

ASRS Report Number.Accession Number : 1974320

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Confusion

Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Aircraft In Service At Gate  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : MEL  
Contributing Factors / Situations : Procedure  
Primary Problem : MEL

## Narrative: 1

I was working Overtime on the 737 desk. My normal desk is the Airbus desk. I received a call from Maintenance that they had received a call out for Logbook Deferral Sheet (List). The previous technician working the issue sent the procedure for a check to try and identify the fault. The mechanic informed me that it had failed. Upon looking at the MELS I came across XX-XXA which was for the Inertial Reference System. I asked the flight crew to perform the maintenance procedures and they said everything passed and they were good with it. Once the aircraft was at ZZZ the outbound flight crew had an issue with the MEL. Upon further investigation and some extra knowledge passed from some other technicians on the 737 desk, it was explained to me that MEL XX-XXA does not cover the portion of the ADIRU (only the IRU). The aircraft was immediately taken Aircraft Out of Service in ZZZ and a lock placed on the aircraft to prevent departure. As an Airbus technician I misread the MEL. I thought it included the entire ADIRU just like on the Airbus in certain cases. REF Airbus MEL XX-XYC. I know that is not an excuse but ultimately it lead to my decision making in this case. Asking for help when needed and carefully reading the MEL to verify that it can be correctly applied.

## Synopsis

Maintenance Control Technician reported misapplying an MEL due to confusion between B737 and A320 aircraft. The aircraft was taken out of service to address the issue.



## Time / Day

Date : 202302

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A321

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Testing

## Component

Aircraft Component : Turbine Engine

Aircraft Reference : X

Problem : Malfunctioning

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Function.Maintenance : Inspector

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 1974319

Human Factors : Confusion

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Flight Crew : Returned To Departure Airport

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

On Day 4, Aircraft X returned to field because of a high EGT (Exhaust Gas Temperature). Item had been written up on Day 0, Day 1, Day 2, Day 3, and then the final write-up on Day 4. Per Procedures Manual XXXXXX, AMTs (Aircraft Maintenance Technician) signing off a report should go back 3 days to see if it a repetitive write-up. Maintenance Manual YYYYYY states the definition of a repetitive is 3 times in 15 days. How did this one slip through the cracks? Information was given to me by a concerned crew member.

## Synopsis

A321 Maintenance Inspector reported that a repetitive write-up that should have required additional maintenance actions went unnoticed and there was a non-compliance with procedures.

## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A320

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : N

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Testing

## Component : 1

Aircraft Component : Turbine Engine

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Powerplant Fuel Control Unit

Aircraft Reference : X

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1974307

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
Were Passengers Involved In Event : N  
When Detected : Routine Inspection  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

On Day 1 hangar work load 7 aircraft and five mechanics and myself where assigned Aircraft X. At Approx. XA30 am Person A (lead) asked us to assist in closure of number 2 eng reverser/fan cowls and run #2 engine for ops check of bleed system for that motor. With all five mechanics getting aircraft ready for engine run. Everyone assisted with closure. No one noticed the red streamer hanging for the the part being pinned. Latches were closed and secured by Person B. Person A and I ran #2 eng performed operational checks. No ECAM warning or messages noted. aircraft was pulled back into hangar after engine runs due to lack of parking.

## Synopsis

Technicians reported a rig pin attached to a red streamer was left installed in the #2 engine when the engine cowls and thrust reversers were closed and a post maintenance engine run was accomplished.

## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A320

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Testing

## Component

Aircraft Component : FCC (Flight Control Computer)

Manufacturer : FCDC #1

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1974302

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Human-Machine Interface

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Other

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Maintenance  
When Detected : Aircraft In Service At Gate  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Aircraft

## Narrative: 1

A FCDC (Flight Control Data Concentrator) was robbed from Aircraft Y for out of service Aircraft X at the gate, which had a non-deferrable unserviceable FCDC in Position #1. We attempted to determine configuration through the company parts hotline who were confused. Then, ZZZ Engineering stepped in to determine effectivity as the IPC (Illustrated Parts Catalog) was extremely complex and convoluted for this part. I, Supervisor, was provided IPC references, and an Airbus FCDC interchangeability logic table, then provided clear pathway to prove effectivity for a Pre-Mod 31335 A319 aircraft. We were assured it was effective via these references and guiding us through them, Avionics and I. The avionics technicians were fine with that and installed the deemed effective FCDC into aircraft and it tested fine with no faults. I signed off the log page and the aircraft was released and flew away to ZZZ1. Engineering came back and said they had dug through induction paperwork and found that Aircraft X, that we just signed off on, was actually a Post-Mod 31335 aircraft, and the new logic table showed the part to be not effective and we would now have an inspection situation on our hands. I immediately contacted Maintenance Control and let them know the aircraft was flying with a non-effective part and they took it from there. I signed off and cleared the log page as a Supervisor with the wrong IPC and logic data provided to me by Engineering and wanted it on the record. The technicians were notified as they did the installation and parts rob. While the part functioned correctly, it was only for a pre-mod aircraft, not a post-mod aircraft like Aircraft X. I feel the extremely complex and convoluted IPC confused the technicians, myself, and ZZZ Engineering, and would need to be simplified for components like these. Aircraft will be required to replace inspection with correct, effective part as researched by Engineering, and shipped to assigned station. Engineering is following up with Maintenance Control to figure out best course of action.

## Synopsis

A320 Maintenance Supervisor reported signing off a log page and learning that the incorrect and ineffective part was used after the aircraft was released.

## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Make Model Name : No Aircraft

## Person

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Parts / Stores Personnel

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1974157

Human Factors : Other / Unknown

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Ground Personnel

## Events

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance

When Detected : Routine Inspection

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Equipment / Tooling

Contributing Factors / Situations : Incorrect / Not Installed / Unavailable Part

Primary Problem : Incorrect / Not Installed / Unavailable Part

## Narrative: 1

We receive various hazmat material to be shipped back to the vendor. One such item is explosives or squibs 1.4c. They are supposed to be in, I believe a color X or Y metal cabinet. We do not have such cabinet and are in need to stay in compliance with the FAA. Not sure why this facility has never had one.

## Synopsis

Air carrier maintenance store personnel reported an ongoing Hazmat violation due to the lack of proper storage cabinet during Hazmat handling.

## Time / Day

Date : 202204

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Repair

## Component

Aircraft Component : Nacelle/Pylon Firewall

Aircraft Reference : X

Problem : Improperly Operated

Problem : Design

## Person

Location Of Person : Gate / Ramp / Line

Reporter Organization : Personal

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

Experience.Maintenance.Inspector : 2

Experience.Maintenance.Lead Technician : 31

Experience.Maintenance.Technician : 29

ASRS Report Number.Accession Number : 1971779

Human Factors : Situational Awareness

Human Factors : Confusion

Human Factors : Human-Machine Interface

## Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Maintenance



When Detected.Other

Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

While replacing the firewall assembly on a Cessna 172N Aircraft X I measured the thickness of the lower firewall that I had removed at .020". I later learned that the material is .016", I remeasured the old firewall section and it was in fact .016". I contacted a Design Engineering Representative for approval for the increase in thickness. He issued me a repair authorization approving the repair. In my log book entry, I failed to use the word "Fabricated" when referring to the lower firewall section, I used "replaced" because I had replaced the upper firewall section with a purchased part from Cessna. I installed the firewall sections per the Cessna drawing. The drawing that I had did not specify the thickness of either section. With the Design Engineering Representative approval the aircraft is airworthy and the repair is legal. I feel the factors that caused this error where me miss reading the caliper and the length of time it took from start of the project to the finalization of paperwork (3 years). Also in my mind I was sure that the metal thickness was correct because in my experience .020 is more widely used and .016 is an odd thickness for powered aircraft. I know that this firewall replacement is done correctly and at no time was this aircraft unsafe.

## Synopsis

Technician reported errors in measurements after a firewall was fabricated and replaced on a C172 aircraft. A Design Engineering Representative was engaged to approve the fabrication and replacement.

## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-900

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : N

Maintenance Status.Required / Correct Doc On Board : N

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Testing

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Repair

## Component

Aircraft Component : Cowling/Nacelle Fasteners, Latches

Manufacturer : #1 Nose Cowl

Problem : Improperly Operated

Problem : Failed

## Person

Location Of Person : Hangar / Base

Location In Aircraft.Other

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1971414

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Other

## Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR

Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Detector.Person : Maintenance  
Detector.Person : Passenger  
Detector.Person : Flight Crew  
When Detected : Aircraft In Service At Gate  
When Detected : In-flight  
When Detected : Routine Inspection  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : MEL  
Contributing Factors / Situations : Procedure  
Primary Problem : Aircraft

## Narrative: 1

After the history I have seen with Aircraft X and Aircraft Y, for the T12 access /pressure relief door opening in flight, Aircraft Y was brought to my attention. If you look at the rotatable parts history info, it is determined that the nose cowl that was removed from Aircraft X, #1 engine for having tons of history for the (412AR T12 pressure relief door) opening in flight, was removed, made unserviceable and sent to vendor for overhaul. Then it came back serviceable and was installed on Aircraft Y log XXXXXXXX on #1 engine. Now it's having the same issue with lots of history. See logs below. So, the vendor failed to correct the issue of finding pneumatic/air leak in the unpressurized area of nose cowl. At one point the door has been taped secure, see log XXXXXXXY and pictures attached to the log. This is a pressure relief door it should never be taped secure. Now it cannot do its job!!! There is no reference given in the log page to tape shut the door - no Aircraft Maintenance Manual (AMM) reference, no Engineering Order reference, no Structural Repair Manual (SRM) reference, no Flight Information Manual (FIM) reference, no nothing - just tape it shut!!!! ---- wow ---- See log history below: Log XXXXXXXX Log XXXXXXXY Log XXXXXXXZ Log XXXXXXXA Log XXXXXXXB Log XXXXXXXC - latch r/r Log XXXXXXXD - PAX report Log XXXXXXXE - PAX report Log XXXXXXXF - taped shut Log XXXXXXXG - log with conflicting info -- see below - latch r/r Log XXXXXXXH - log - latch r/r The log XXXXXXXG was created for #2 ENG due to history for panel 412AR. This is wrong. Panel 412AR is on #1 engine and not on #2 engine. Must be a typo error. The history is on #1 engine. The whole log page has conflicting information. Please note that this Aircraft Y is currently flying around with a faulty/ bad nose cowl on #1 engine.

## Synopsis

Technician reported a Nose Inlet Cowl with extensive history for a Pressure Relief Door opening in flight is still in service without correct documentation or Maintenance action.

## Time / Day

Date : 202208

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 MAX Series Undifferentiated

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Parked

Maintenance Status.Maintenance Deferred : N

Maintenance Status.Records Complete : N

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Work Cards

Maintenance Status.Maintenance Items Involved : Installation

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Testing

## Component : 1

Aircraft Component : Nozzle

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Fan Reverser

Aircraft Reference : X

Problem : Malfunctioning

## Component : 3

Aircraft Component : Other Documentation

Aircraft Reference : X

Problem : Improperly Operated

## Component : 4

Aircraft Component : Aircraft Logbook(s)

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person : Hangar / Base

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Function.Maintenance : Inspector

Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1970914

#### Person : 2

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1970917

#### Person : 3

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1970919  
Human Factors : Confusion  
Human Factors : Situational Awareness

#### Person : 4

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Inspector  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1970923  
Human Factors : Confusion  
Human Factors : Situational Awareness

#### Person : 5

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1970920  
Human Factors : Confusion  
Human Factors : Situational Awareness

#### Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Detector.Person : Maintenance  
Detector.Person : Flight Crew  
When Detected : Aircraft In Service At Gate  
When Detected : Routine Inspection

Result.General : Maintenance Action  
Result.Aircraft : Aircraft Damaged

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

### Narrative: 1

I verified the part number of the new Fuel Nozzles and Seal Replacement. In addition, I verified the installation and torque of the Fuel Nozzle Bolts, as well as, the torque and safety of the Fuel Nozzle B-Nuts.

### Narrative: 2

On Day 0, I was assigned to work on the Fuel Nozzle replacement on Aircraft X. I performed the removal of Fuel Nozzles per step XX of Engineering Authorization X and Aircraft Maintenance Manual 73-11-05-000-802-G-00.

### Narrative: 3

I signed off steps XX-XY of the Work Card, which is the Fuel Nozzle installation. The incident concerned was with the Start Bleed Bracket that is mounted with one bolt on each side of #7 Fuel Nozzle. One of the bolts in that bracket backed out causing engine air to exit the hole and burn through the heat blanket into the thrust reverser. The Maintenance Manual Ref. 73-11-05-400-802-G-00 for those steps say (f) Install Fuel Nozzle #7, (f) 5 says Install the 2 bolts that attach the start bleed bracket to the combustion case. So that Bracket is under the Nozzle install. I have seen that that Bracket is sometimes installed later during the Nozzle install because it is another piece that gets in the way when doing the Nozzle torques, but once the Nozzles are in, the Bracket is installed and torqued. If we had all the Nozzles in and safetied at XA30, that Bracket would have been installed making ready for the duct and tubing installations. I cannot see that a Bolt was missed during installation. Also, I believe, if it was not installed, we would have found the leak, during the leak check of the Ducting. So, what can we do to remedy this event. Have everybody follow the maintenance manual so that start bleed bracket is installed at the nozzle assembly time, so there are two sets of eyes witnessing it. But we also have a problem with this engine. Never before have we had to change nozzles on an engine so often. For all the hype of 3D printed nozzles and faster productions times we have sacrificed engine reliability. With the numerous times that the nozzles will have to be replaced over the life of these engines we are already facing fastener issues. How many times can we replace these nozzles before the locking ability of the fasteners is gone. By what are we to gauge the holding ability of these nozzle fasteners? Will we have to start doing torque checks on them to see it their any good? We have to figure this out going forward because at the second or third set of nozzle changes we are already seeing these problems and replacing fasteners. More maintenance on engines leads to more wear and tear. How many times will fasteners be replaced before we experience enlarged holes in the engine case? I believe this bolt which backed out may be the beginning of a lot of issues for this engine.

### Narrative: 4

On Day 1, I was the Inspector on the fuel nozzle replacement. I performed step XX Idle Leak Check. No leaks noted.

### Narrative: 5

A bolt was found missing at the 4 o'clock position at the Combustor Case between Fuel Nozzles. Engineering Authorization X was accomplished on #2 Engine on Day 0 to Day 1. Missing Bolt caused damage to the right-hand Thrust Reverser and Wire Harness requiring replacement of both Thrust Reversers and Wire Harness. My involvement in this task was to document the part numbers of the removed Fuel Nozzles and the installed Fuel Nozzles (Blocks #28 and 30). This task went through 3 days of turnovers. Some steps in the Engineering Authorization are complex and refer to the Aircraft Maintenance Manual which contains many sections of Ducting, Brackets and associated disassembly to access the Fuel Nozzles. Not sure as to how this occurred other than it was missed during a recheck of the Assembly of this area possibly by backing out over time.

## Synopsis

Technicians reported attaching bolt was left uninstalled during a Fuel Nozzle installation. The aircraft suffered damage to a Thrust Reverser Translating Sleeve due to burn through.

## Time / Day

Date : 202302

## Place

Altitude.AGL.Single Value : 0

## Environment

Light : Night

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777-200

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Taxi

## Component

Aircraft Component : Cowling

Aircraft Reference : X

Problem : Improperly Operated

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Airframe

Qualification.Maintenance : Powerplant

ASRS Report Number.Accession Number : 1970912

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Maintenance

## Person : 2

Location Of Person : Gate / Ramp / Line

Reporter Organization : Air Carrier

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

ASRS Report Number.Accession Number : 1970924

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Maintenance

## Person : 3



Location Of Person : Gate / Ramp / Line  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1970916  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 4

Location Of Person : Gate / Ramp / Line  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1970922  
Human Factors : Situational Awareness  
Human Factors : Distraction  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Person : 5

Location Of Person : Gate / Ramp / Line  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1970915  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

#### Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Conflict : Ground Conflict, Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Ground Event / Encounter : Vehicle  
Anomaly.Ground Event / Encounter : Ground Equipment Issue  
Detector.Person : Maintenance  
When Detected : Taxi  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Aircraft : Aircraft Damaged

#### Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Environment - Non Weather Related  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

#### Narrative: 1

Day 0 morning while moving Aircraft X from Dock to spot XX, the fuel pit we hit a scissor lift with the #1 engine inlet cowl. I was in the flight deck riding brakes. After we stopped in spot XX I was motioned to set the brakes. After waiting for a few minutes in the aircraft, I was again motioned to release the brakes and told we were bringing the aircraft back to dock. Once parked I was told to set the brakes and come down. I was then notified that we struck a scissor lift with the #1 engine inlet cowl on the outboard side. Spot XX was dark in the early morning and has a lot of unused docking structure on the left-hand side that is within the envelope of the aircraft which makes it difficult to wing watch.

#### Narrative: 2

We were tasked with dedocking Aircraft X from Dock to park on spot XX. We tailed aircraft onto spot XX and pulled forward towards the 777 stop line. As we neared the stop line, a chirping/screeching sound was heard, which sounded like the tow-team warning system (TTWS) sounding off. An immediate stop was initiated and upon assessment of the sound, it was discovered that the engine in fact made contact with a scissor lift creating the sound.

#### Narrative: 3

On Day 0 we were moving Aircraft X from dock to spot XX fuel pit. I was right-hand Wing Walker and the right-hand Wing was clear. As aircraft was being towed forward I heard left-hand Wing Walker yell out. Aircraft had already stopped and went to see and #1 Engine had hit a scissor lift. I did not see what happened on left-hand side as I was watching right-hand Wing. That particular area is very very dark. No lighting at all and should have some lights put in. The old dock structures are not used and should be moved. We park plane in those spots (XY and XX) all the time. Its unsafe for us and the Aircraft at night with not lighting

#### Narrative: 4

I was left-hand Wing Walker on Aircraft X on the morning of Day 0 around XA00 before the sun had come up. While parking the aircraft on the fuel pit, I was turned watching the left-hand Wing Tip come across the Dock structure and I heard a squeak. When I turned forward and I saw a scissors lift next to the #1 ENG. I yelled out and pushed the tow-team warning system but we had already come to a stop. I then moved the scissor lift to see if there was damage. In the future if the old dock structure was removed from the envelope you could walk behind the wing tip and have a better or constant view of the entire Aircraft.

#### Narrative: 5

While positioning Aircraft X on the fuel pit (Spot XX) after de-docking from dock, we scraped the #1 Engine Inlet Cowl (Outboard) against the corner of a parked scissors lift. I was driving the tug and mistakenly thought I heard the tow-team warning system (TTWS) sound. I had failed to bring the TTWS alarm box from the back cab to the front of the tug. The damage was noticed at the instant we stopped the aircraft on the stop line for the 777 and I had inadvertently set the tug parking brake before putting the tug in neutral. This caused the horn in the tug to sound which may have led to my thinking I heard the TTWS

alarm. We then pulled the aircraft back into dock X to assess the damage. Move all of the old/unused aircraft dock structures that are stored around aircraft parking areas. If that equipment wasn't there in the envelope we wouldn't have to concentrate on the wing passing over it. Better lighting in that area would also be helpful.

## Synopsis

Technicians reported ground damage to the #1 Engine Inlet Cowl during a reposition to the fuel pits from the dock. The aircraft was towed into a parked scissors lift.

## Time / Day

Date : 202301  
Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZZ.Airport  
State Reference : FO  
Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC  
Light : Night

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : Commercial Fixed Wing  
Crew Size.Number Of Crew : 2  
Operating Under FAR Part : Part 121  
Flight Plan : IFR  
Mission : Passenger  
Flight Phase : Initial Climb  
Maintenance Status.Records Complete : Y  
Maintenance Status.Released For Service : Y  
Maintenance Status.Required / Correct Doc On Board : Y  
Maintenance Status.Maintenance Type : Scheduled Maintenance  
Maintenance Status.Maintenance Items Involved : Installation  
Maintenance Status.Maintenance Items Involved : Inspection  
Maintenance Status.Maintenance Items Involved : Work Cards

## Component

Aircraft Component : Cargo Door  
Aircraft Reference : X  
Problem : Malfunctioning  
Problem : Improperly Operated

## Person : 1

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Powerplant  
Qualification.Maintenance : Airframe  
ASRS Report Number.Accession Number : 1969022  
Human Factors : Confusion  
Human Factors : Training / Qualification  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Person : 2

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1969024  
Human Factors : Training / Qualification  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Person : 3

Location Of Person : Hangar / Base  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1969025  
Human Factors : Training / Qualification  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Human Factors : Confusion  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Flight Crew : Returned To Departure Airport  
Result.Flight Crew : Requested ATC Assistance / Clarification  
Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Human Factors

## Narrative: 1

During bulk cargo door seal inspection, the bulk cargo door seal was found damaged. A new bulk cargo door seal was installed in the wrong position. The aircraft did not pressurize after take-off. Lack of installation procedures interpretation and pressurization system was not tested. The seal reference marks on the top and bottom should be improved. It should be faced outboard and not inboard when installed. Aircraft pressurization test in the procedures [should be required] after installation.

#### Narrative: 2

**Replaced the bulk cargo door seal and during the aircraft climb, the cabin didn't** pressurize. The bulk cargo seal was replaced on Day 0. Seal is easy to install incorrectly, and the maintenance manual reference mark is not clear. During installation of the seal followed reference mark top and bottom with the view mark to the outside. [There is no] written reference mark [on] top and bottom in the manual. In accordance with the manual [it is] not necessary [for a] cabin pressure test. It would be interesting [to] add a cabin pressure test after replacement at the bulk cargo door seal and improve reference mark in the maintenance manual.

#### Narrative: 3

During bulk cargo door seal replacement, seal was installed improperly causing a pressurization leak during aircraft climbing. During bulk cargo door seal installation there was a improper understanding of maintenance procedures. Reference marks on the seal are not so clear. Marks are faced into the hidden side of the seal. Another suggestion is about the AMM installation procedures that do not request the cabin pressurization leak test after replacement.

#### Synopsis

Technicians reported a damaged Bulk Cargo Door Seal was replaced incorrectly resulting in the aircraft unable to pressurize and returning to departure airport.

## Time / Day

Date : 202301

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X  
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 : Taxi  
Route In Use : Vectors

## Component

Aircraft Component : Turbine Engine  
Aircraft Reference : X  
Problem : Malfunctioning

## Person

Location Of Person : Gate / Ramp / Line  
Reporter Organization : Air Carrier  
Function.Maintenance : Technician  
Qualification.Maintenance : Airframe  
Qualification.Maintenance : Powerplant  
ASRS Report Number.Accession Number : 1968242  
Human Factors : Situational Awareness  
Human Factors : Training / Qualification  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Maintenance  
Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Ground Personnel  
Were Passengers Involved In Event : N  
When Detected : Taxi  
Result.General : Maintenance Action  
Result.General : Flight Cancelled / Delayed  
Result.Flight Crew : Requested ATC Assistance / Clarification  
Result.Flight Crew : Returned To Gate  
Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

I was assigned to a gate return for flight Aircraft X ZZZ-ZZZ1. The original Crew assigned to the push back noticed an engine leak and informed the Captain before takeoff. The Ramp/Cargo Manager went out on to the taxiway and inspected both engines before giving the flight deck the thumbs up the plane was clear for takeoff. I watched as the Manager inspected the aircraft without proper training to clear the issue regarding the leak. A Ramp/Cargo Manager went outside of his authority and OKed a plane with an engine leak and informed the Captain the plane was clear for takeoff, however the plane had orders to return to gate for a Maintenance Technician to inspect the issue. Aircraft Maintenance was immediately notified of the event. Removal of the Manager who overstepped his authority on the ramp. Understanding your assignments as a Manager and letting the proper and qualified individuals correct the issue. If safety is our most important goal, such gross violations and disregard for Passenger and Flight Crew safety must be addressed.

## Synopsis

Technician reported a Ramp/Cargo Manager cleared an aircraft for operation following a reported engine leak. The Technician reported this to Maintenance and the aircraft was directed to return to the gate for Maintenance action.