

20 October 2015
Reference: F0002494

Dear XXXX

I am writing in respect of your recent request of 28 September 2015 for the release of information held by the Civil Aviation Authority (CAA).

Your request:

1. *Please state the total number of recorded incidents of aircraft engine fire in the following years: a) 2011, b) 2012, c) 2013, d) 2014 and e) 2015 so far.*
2. *Please break the totals down by type of aircraft.*

Our response:

Having considered your request in line with the provisions of the Freedom of Information Act 2000 (FOIA), we are able to provide the information below.

Incident reports are provided to the CAA under the terms of the Mandatory Occurrence Reporting (MOR) scheme, as described under Article 226 of the Air Navigation Order 2009 (ANO). Each report made is reviewed and, where appropriate, further investigation carried out and action taken.

We have carried out a search of the CAA MOR database for reports of fire (or potential fire) involving an engine (including any engine component or Auxiliary Power Unit (APU)) for the period 1 January 2011 to all processed reports as at 6 October 2015, regardless of the aircraft nationality or location, and a summary is provided in the attachment. As well as commercial aircraft, the information also includes reports involving helicopters and light aircraft.

We have not included identifying information in these summary reports as this information is exempt from disclosure under Section 44(1)(a) of the FOIA.

Section 44(1)(a) provides that information is exempt information if its disclosure is prohibited by, or under, any enactment. Under Section 23 of the Civil Aviation Act 1982, information which relates to a particular person (which includes a company or organisation) and has been supplied to the CAA pursuant to an Air Navigation Order is prohibited from disclosure. A copy of this exemption can be found below.

Civil Aviation Authority

Aviation House Gatwick Airport South Gatwick RH6 0YR. www.caa.co.uk

Telephone: 01293 768512. foi.requests@caa.co.uk

For more information about the Mandatory Occurrence Reporting scheme, please refer to CAP382 which can be found at: www.caa.co.uk/cap382.

If you are not satisfied with how we have dealt with your request in the first instance you should approach the CAA in writing at:-

Caroline Chalk
Head of External Information Services
Civil Aviation Authority
Aviation House
Gatwick Airport South
Gatwick
RH6 0YR

caroline.chalk@caa.co.uk

The CAA has a formal internal review process for dealing with appeals or complaints in connection with Freedom of Information requests. The key steps in this process are set in the attachment.

Should you remain dissatisfied with the outcome you have a right under Section 50 of the FOIA to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner's Office
FOI/EIR Complaints Resolution
Wycliffe House
Water Lane
Wilmslow
SK9 5AF

www.ico.gov.uk/complaints.aspx

If you wish to request further information from the CAA, please use the form on the CAA website at <http://www.caa.co.uk/application.aspx?catid=286&pagetype=65&appid=24>.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Stevens'.

Mark Stevens
External Response Manager

CAA INTERNAL REVIEW & COMPLAINTS PROCEDURE

- The original case to which the appeal or complaint relates is identified and the case file is made available;
- The appeal or complaint is allocated to an Appeal Manager, the appeal is acknowledged and the details of the Appeal Manager are provided to the applicant;
- The Appeal Manager reviews the case to understand the nature of the appeal or complaint, reviews the actions and decisions taken in connection with the original case and takes account of any new information that may have been received. This will typically require contact with those persons involved in the original case and consultation with the CAA Legal Department;
- The Appeal Manager concludes the review and, after consultation with those involved with the case, and with the CAA Legal Department, agrees on the course of action to be taken;
- The Appeal Manager prepares the necessary response and collates any information to be provided to the applicant;
- The response and any necessary information is sent to the applicant, together with information about further rights of appeal to the Information Commissioners Office, including full contact details.

Freedom of Information Act: Section 44

(1) Information is exempt information if its disclosure (otherwise than under this Act) by the public authority holding it-

- (a) is prohibited by or under any enactment,
- (b) is incompatible with any Community obligation, or
- (c) would constitute or be punishable as a contempt of court.

(2) The duty to confirm or deny does not arise if the confirmation or denial that would have to be given to comply with section 1(1)(a) would (apart from this Act) fall within any of paragraphs (a) to (c) of subsection (1).

File Number	Date	Aircraft Manufacturer	Aircraft Model	Aircraft category [Aircraft Sub-Category]	Headline	Narrative text		
201100089	04/01/2011	PIPER	PA31	Aeroplane	PAN declared and a/c returned due to rough running RH engine.	During initial climb RH engine appeared to be running roughly and RPM indications varying significantly. PAN declared and a/c returned. Uneventful approach and landing with the engine continuing to run roughly until the throttles were retarded to idle. On engine shutdown, RH engine continued to run for approx 10secs after the mixture control had been moved to the off position. High power run carried out with all indications appearing normal. Subsequent investigation found an intermittent mag drop, with points closed and burnt.		
201102798	20/03/2011	BOEING	777	Aeroplane	As a/c pulled onto stand flames were coming from the APU.	Flames stopped when APU turned off and fixed ground power started up. Flight crew had noticed the APU making a strange noise before departure, however, engineer assured them that there were no problems.		
201103968	18/04/2011	AEROSPATIALE	SA365	Helicopter	UK Serious Incident: Nr1 engine fire during taxi out. A/c stopped on taxiway & shut down. A/c fire drill actioned, although squibs not fired due to no cockpit indications. AAIB Field investigation.	CAA Closure: Following a normal despatch and engine start for a routine offshore flight, the ground engineer monitoring the helicopter's departure noticed flames emanating from the Nr1 engine. As there was no dedicated means for ground staff to inform ATC of the incident, in order to alert the crew, the ground engineer chased the helicopter along the taxiway to attract the crew's attention and communicate with them using hand signals. The crew shutdown the helicopter and the passengers were evacuated. The ground engineer extinguished a small oil-fed fire in the engine bay with a handheld fire extinguisher from the cockpit. During disassembly, the lower connection of the gas-generator rear-bearing oil supply duct was found to have a torque of 10Nm rather than the required 20Nm reducing the contact pressure on the copper seal, thus creating the leak path. The operator considered that the leaking oil from the lower duct connection had pooled in the bottom of the casing, then exited at the split line between the gas generator and power turbine modules before igniting on the hot engine casing. However, they stated that the torque on the duct had not been changed during the maintenance check. The operator stated that in their opinion the internal oil leak was supplemented by a leak at the o-ring seal (the same o-ring that had been replaced during maintenance check), as evidenced during the engine strip inspection by oil streak marks on the outer casing, originating from this area. They considered that the o-ring might have been damaged during installation. Two Safety Recommendations made, 2011-095 and 2011-096, both addressed to the engine manufacturer. AAIB Bulletin 04/2012, Ref: EW/C2011/04/06.		
201104159	19/04/2011	SIKORSKY	S76	Helicopter	During engine ground test, nr1 engine rapidly wound down with a screaming noise. T5 noted to rise rapidly to 940degC and fire observed from nr1 engine tail pipe. A/c shut down and evacuated.	No fire warnings were observed from the a/c systems. Engine removed and is subject to manufacturer's investigation.		
201104923	19/04/2011	PIPER	PA28	Aeroplane	Engine caught fire on start up following refuelling after previous flight. Fire confined to engine bay and ancillary engine components.	Over primed engine suspected.		

201105115	15/05/2011	BOEING	737	Aeroplane	Fire in nr1 engine during engine run after engine change carried out.	CAA Closure: The investigation revealed that the fire resulted from fuel entering the engines oil system. Failure of the servo heater was identified as possibly being the cause. After consultation with the a/c manufacturer an inspection of the wing and pylon was conducted with no further damage.		
201105509	21/05/2011	BOEING	737	Aeroplane	Engine tail pipe fire.	ATC informed flight crew of flames coming from nr2 engine. No rise in EGT or fire indications observed on flight deck. QRH actioned. A/c towed back to stand and passengers disembarked. Engineer carried out full engine check. All satisfactory and flight resumed.		
201105527	22/05/2011	BOEING	747	Aeroplane	Loud bang heard from the rear of the a/c during take-off and external reports of flames from nr4 engine. EPR observed to decrease to 1.30. Take-off rejected. A/c returned to the stand.	CAA Closure: Root cause of the surge was due to one high pressure compressor stage 1 blade aerofoil fracture and release following domestic object debris impact from an unidentified source.		
201108411	21/07/2011	BOEING	737	Aeroplane	Serious Incident: After take-off the crew declared an emergency due to nr2 engine fire. A/c diverted and landed without incident. 180 POB. Spanish CIAIAC are conducting a field investigation.	CAA Closure: Nr4 bearing failure (new outer race material) due to outer race spalling area evidences associated with cage rupture and damaged rolling elements. There is no evidence of mis-assembly, no evidence of hard particle contamination, no corrosion and analysis showed that bearing material confirmed conformity. The manufacturer instigated containment actions to increase nr4 bearing reliability.		
201109065	04/08/2011	BOEING	737	Aeroplane	During taxi to stand, another a/c advised that flames omitting from APU. No warnings on flight deck of fire.	APU shut down. Fire vehicles in attendance and no further flames reported. A/c disembarked normally.		
201109271	04/08/2011	BOEING	757	Aeroplane	Flames evident from engine tailpipe during attempted engine start using Air Start Unit (ASU). QRH actioned - no EGT exceedance. ASU considered faulty and was replaced.	ASU used for engine start due to inoperative APU.		
201109552	14/08/2011	AIRBUS	A319	Aeroplane	A/c experienced a pronounced jolt and a loud bang shortly after power reduction during initial climb. Momentary ECAM 'Eng nr1 stall'. A/c returned.	All parameters stayed normal. Passengers had reported seeing flames from rear of nr1 engine. ACAMS produced an engine exceedance and stall message.		

201109830	19/08/2011	CESSNA	152	Aeroplane	Engine fire after starting.	Following start, engine cut out. During subsequent start attempt, ATC observed flames emanating from the underside of the a/c. RFS deployed.		
201111972	29/09/2011	OTHER		Glider	Engine caught fire during approach to land. A/c landed safely but a fire ensued and the a/c was destroyed. Delegated to the BGA.	CAA Closure: Oil in the engine bay, delivered either by a leak or overfilling during replenishment, plus retraction of the engine without sufficient cooling is the reported cause. The BGA have promulgated notes on retraction process to all ASH 26E owners. The manufacturer has improved drainage and ventilation on later models.		
201112291	06/10/2011	AIRBUS	A321	Aeroplane	Tail pipe fire after engine shutdown.	After shutting down on stand, engineers came to the flight deck to advise observation of some 'very small flames' in nr1 engine tailpipe after shutdown which had now gone. Engineer asked if crew would motor the engine just to make sure. Engine cranked for 30secs and engineer confirmed all was satisfactory. Tech Log entry made. There were no indications on the flight deck, nor any observations from cabin crew or passengers.		
201112953	15/10/2011	AIRBUS	A320	Aeroplane	Take-off rejected at approximately 100kts due to a loud bang and a/c vibration. ATC report of fire/smoke. After fire service inspection, a/c returned to stand.	Engineering inspection found significant damage to nr2 engine. □ CAA Closure: A preliminary report into the cause of the incident from the manufacturer describes the primary cause as being due to a previous birdstrike. This led to a high cycle fatigue crack propagation in two blades within the stage 4 'booster' (compressor) section. The cracks propagated from the root area of the leading edge, leading to the liberation of one of the two blades. The engine will be repaired as necessary to return it to service. The operator has procedures in place to both report and investigate birdstrike events.		
201114227	15/11/2011	BOEING	747	Aeroplane	Engine nr2 tailpipe fire on start.	During manual start of engine nr2, engineer's tool slipped out of valve manual override aperture causing the engine starter to disengage before self sustaining speed reached. Engine ran down resulting in momentary tailpipe fire which self extinguished within 10secs. Second manual start successful and uneventful.		
201114443	14/11/2011	AIRBUS	A319	Aeroplane	Engine nr2 tailpipe fire on start due to APU failure.	During engine nr2 start on pushback, the APU failed and auto shut down. This caused engine nr2 to fail to start with a 5-10sec tailpipe fire.		
201114994	06/12/2011	AIRBUS	A319	Aeroplane	Nr1 engine stall during climb-out with flames observed from back of engine. A/c returned.	A bang was heard and vibration felt. After a short delay, ECAM 'Eng Stall' was triggered but cleared before actions were initiated. Engine indications were normal. A/c returned for a two engine approach. On return, the cabin crew advised that passengers had seen flames from the back of the engine. During subsequent troubleshooting the upper stage 7 bleed valve failed.		

201115570	19/12/2011	EUROCOPTER	EC225	Helicopter	Nr1 engine fire on start up.	During engine starting an orange glow became immediately evident from the LHS of the a/c and the marshaller was seen to be giving the stop signal. Co-pilot verbally indicated there were flames on LHS of a/c. The engine condition switch was immediately retarded to off, the rotor brake applied, the emergency engine fuel shut off lever was retarded and extinguisher 1 discharged. Ground handler saw the flames emanate from the exhaust. As the initial flames receded burning fuel was then seen to run down the side of the a/c and the ground handler tackled this with the fire extinguisher and successfully extinguished them. Marshaller also placed lance down the exhaust to extinguish what was later described as fierce flames that were still present. Whilst the ground handler was fighting the fire the co-pilot indicated that the fire was still evident so bottle 2 discharged. There were no fire indications inside the cockpit. On investigation the pressurising valve was suspected of being stuck in the open position and this was confirmed.		
201115883	27/12/2011	PIPER	PA28	Aeroplane	Small engine fire on start up.	It is thought that over-priming of the engine and over-use of the starter could have contributed to fuel vapours igniting in the engine compartment. A hand held extinguisher was used to put the fire out before the emergency services arrived and there were no injuries.		
201115924	31/12/2011	BOEING	747	Aeroplane	A/c returned to stand due unable to start nr3 engine.	Initially unable to start n3 engine, returned to stand for engineering assistance. Following successful start a/c delayed for approx 1hr due to airport closed because of thunderstorm. On take-off after approx 1min of power up, engine gave two loud bangs and flames were seen from exhaust. A/c returned to stand and flight cancelled.		
201200993	28/01/2012	FOKKER	F27	Aeroplane	Fire indication during LH engine start. Fire services called and a/c evacuated. No fire observed from ATC Tower.			
201201259	04/02/2012	PIPER	PA28	Aeroplane	UK Reportable Accident: Engine caught fire on start up. Fire extinguished by fire service. Four POB, no injuries. Engine cowl damaged. AAIB AARF investigation.	CAA Closure: The pilot reported that, as the outside air temperature was 1deg and this was the first flight of the day, the engine required priming prior to start. This was accomplished by operating the primer five times. The starter was then operated on three occasions, after which the pilot recalled seeing smoke and decided to evacuate the a/c. All occupants evacuated successfully and there were no injuries. The fire service attended and extinguished the fire. The pilot considered that she may have over-primed the engine leading to ignition of the excess fuel in the exhaust. AAIB Bulletin 05/2012, Ref: EW/G2012/02/02		
201201872	22/02/2012	BOEING	747	Aeroplane	Engine surge on rotation.	As rotation commenced two loud bangs were heard followed by nr3 engine temperature increasing rapidly. ECL carried out. Climb continued to FL100. Cabin crew reported a series of bangs followed by two loud bangs and approx 6ft jet of flame from the nr3 engine. Maintrol contacted and a/c returned. No PAN declared due quiet ATC and vectors given for fuel jettison. Engine shutdown and a/c landed safely. Engine inspection revealed no damage and all actions by crew carried out correctly. Engineering suspect an engine surge. Further investigation suggested a HP compressor fault.		
201203481	28/03/2012	PERCIVAL		Aeroplane	UK Serious Incident. Engine failed to start during cold engine relight drill. Smoke in cockpit and fire warning. MAYDAY declared. Forced landing. Two POB, no injuries. AARF investigation.	CAA Closure: The a/c engine did not relight following a planned in flight shutdown, conducted during a post maintenance flight test. A fire warning occurred and the appropriate emergency actions were carried out, after which the fire warning extinguished. The a/c made a successful forced landing at RAF Wyton. Evidence was found of a fire in the region of the a/c where the engine exhaust cone is joined to the jet pipe. The a/c's maintenance organisation advised that there appeared to be no pre-existing defect. It was considered likely that fuel had pooled in the area of the engine cone/jet pipe union during the relight attempts and had subsequently ignited. Although there is a fuel drain in that area, fuel may not drain effectively if the a/c is in other than a level attitude. AAIB Bulletin 09/2012, Ref:EW/G2012/0320.		

201203854	10/04/2012	BOEING	767	Aeroplane	Jet pipe fire in LH engine whilst carrying out dry cycle. Fire extinguished and fire services called.			
201205576	17/05/2012	AEROSPATIALE	AS332	Helicopter	Engine exhaust fire upon start up.	Fire was noticed immediately by the fire guard who indicated for crew to shut down. Extinguisher operated and area made safe. A/c was taken into the hangar and inspected. No damage was found to the engine or surrounding airframe and ground runs were carried out successfully. A/c returned to service. After the last flight of the day the nr1 engine pressurising valve was replaced as this is a possible cause of excessive fuel in the exhaust. Engineering are monitoring the next few starts to ensure continued satisfactory operation.		
201206116	04/06/2012	EMBRAER	ERJ190	Aeroplane	Nr2 engine tailpipe fire during taxi.	Nr2 engine had been shut down during the taxi in. During hold for parking, crew were advised that the engine was on fire and on parking, the tailpipe ECL actions were ordered which put the fire out. Passengers were then allowed to leave the a/c. Reporter notes that this is the second occurrence in two days.		
201206870	20/06/2012	EXTRA	300	Aeroplane	Engine fire on start up.	On second start attempt, pilot informed by Tower that there was an engine fire. Pilot ensured fuel mixture was at cut-off position and engaged the starter motor for another 3-5secs to try to extinguish the fire. Pilot exited the a/c and airfield fire service extinguished the fire with a hand held extinguisher. Engine cowling and wiring loom damaged. On investigation, it was assessed that the incident was caused by the pilot over fuelling the engine during a hot engine start. Pilot re-briefed as part of a refresher training package, which covered all aspects of Extra 300 engine starting procedures and relevant emergencies.		
201207518	04/07/2012	BOEING	747	Aeroplane	MAYDAY declared and a/c returned following an engine fire and subsequent shutdown of engine nr4.	The a/c suffered severe damage to engine nr4. Fuel dumped and an emergency landing was safely carried out.		
201208497	24/07/2012	BOEING	747	Aeroplane	Jet pipe/fuel vapour flash fire from nr3 engine.	After replacement of VSV actuator and during routine engine testing, a flash fire occurred causing damage to flaps. Ailerons, fairings and panels, mainly scorching, discolouration and paint damage. No injuries to any person in the vicinity. Engine shut down and airport fire service attended. AOG for inspection and repairs. □ CAA Closure: The engineer in charge of the engine run had failed to isolate the 'IGN' and 'STBY IGN' C/Bs. In addition, the incorrect engine fuel control valve C/B had been isolated, the AMM engine run procedure had not been followed or used and neither had the Ground Run Procedures and Check List Manual been followed or used. An un-approved personal checklist had been used as an aide memoir. Communication between ground and flight deck was considered to have been poor, with the use of the flight deck speaker instead of headsets and multiple engineers on the flight deck had resulted in a poor command chain, with the engineer in charge not completing a procedural brief. Measures since taken by engineering management to ensure maintenance be completed law approved maintenance data and procedures to be established addressing command discipline and procedural briefing prior to engine runs. The operator is also recommending that a programme of practical recurrent training for engine runs is introduced for Certifiers, to demonstrate knowledge of safety procedures. Engine motoring inside the hangar is currently allowed but will be discontinued. The operator will publish a summary of the incident in a Safety Letter and it has also been recommended that this incident is included in future Continuation Training and Safety Performance and Culture Course.		
201208673	27/07/2012	MCDONNELL DOUGLAS	MD88	Aeroplane	Three loud bangs with flames observed by ATC from RH engine as a/c touched down. Flight crew informed, a/c vacated runway and shut down.			

201209550	11/08/2012	AIRBUS	A320	Aeroplane	Loud bang heard and take-off rejected at 120kts. Tailpipe fire in nr2 engine. All passengers disembarked safely. Awaiting Foreign Authority decision on investigation type.	Stop carried out approx 120kts with V1 at 154kts. Fire services attended and extinguished the fire. A/c towed back to stand. □ CAA Closure: The reported occurrence took place whilst the aircraft was with another operator, prior to being transferred to the current one. The information was not subsequently transferred to the new operator and no further contact was received from the foreign Authority. No further investigation possible.		
201210843	08/09/2012	DE HAVILLAND	DH89	Aeroplane	UK Reportable Accident: Engine fire on start up. Eight POB evacuated, no injuries. A/c lower wing damaged. AAIB AARF Investigation.	CAA Closure: The a/c was being prepared for flight, with the commander and seven passengers on board. The left engine was started first, followed, after priming, by the right engine. Immediately after the right engine started the pilot saw a flame, which appeared to originate from the outboard section of its engine cowling. Believing the right wing to have caught fire, he shut down both engines. The pilot then assisted with passenger evacuation, which had been initiated by the ground crew when the fire broke out. Ground crew also tackled the fire, with hand held appliances, and had extinguished the fire when the aerodrome fire service arrived on scene. An investigation conducted by the a/c operator concluded that the probable cause of the fire was over-priming of the hot engine, leading to the ignition of overflowed fuel. AAIB Bulletin 01/2013, Ref: EW/G2012/09/04.		
201210877	06/09/2012	PIPER	PA28	Aeroplane	Damage to air intake. Engine failure after landing, whilst vacating runway the engine caught fire. Extinguished by RFFS. Two POB, no injuries.			
201210927	09/09/2012	PIPER	PA28	Aeroplane	UK Reportable Accident: Engine caught fire when started, shortly after refuelling. Three POB evacuated, no injuries. A/c substantially damaged. AAIB AARF Investigation.	CAA Closure: The a/c's engine caught fire during an attempt to start the engine whilst it was hot from having recently run. In the absence of evidence of a pre-existing defect in the fuel system within the engine bay, it is likely that the engine fire was caused by over-priming the hot engine. AAIB Bulletin 01/2013, Ref: EW/G2012/09/05.		
201211006	12/09/2012	BOEING	737	Aeroplane	Engine fire on start-up.	RFFS called to attend the a/c due to engine fire. All departures stopped until incident stood down. Possible cause, faulty starter motor.		
201211210	15/09/2012	BOEING	777	Aeroplane	A/c on pushback from stand, flames observed from APU tailpipe following a 'wet start', APU failed. Fire extinguished by airport fire services.	Passengers evacuated and fire extinguished.		
201215615	31/12/2012	BOEING	777	Aeroplane	Fire reported coming from APU exhaust by ramp staff.	Three spurts of flames observed coming from the APU exhaust as the a/c taxied past stand. The occurrence coincided with APU start up and no further incidents occurred. Ramp staff informed flight crew. Tech Log entry made and engineers informed.		

201300648	12/01/2013	PIPER	PA38	Aeroplane	UK Reportable Accident: Engine fire on start-up. Damage appeared to be limited to engine bay.	CAA Closure: AAIB downgrade to 'Non-Reportable' from AARF investigation. No further investigation to be progressed by the AAIB.		
201300974	30/01/2013	AIRBUS	A320	Aeroplane	Tailpipe fire observed from APU after pushback in windy conditions.	Flames and smoke were seen from the APU exhaust. RFFS attended, no fire or smoke observed and thermal camera showed nothing unusual. RFFS stood down and a/c returned to stand for inspection. No faults found. Flight operated without further incident.		
201301107	03/02/2013	AIRBUS	A319	Aeroplane	Lightning strike on approach.	No signs of thunderstorm activity. As a/c intercepted the glideslope at just under 7000ft an intense lightning strike was experienced. All a/c system remained fully operational except for the 'ENG2 oil quantity indication', which showed amber 'XX' on the ECAM. The approach was continued and the a/c landed safely. On walk around, burn marks were detected on nr1 engine and the RH wingtip. Tech Log entry made.		
201301177	05/02/2013	GROB	G115	Aeroplane	Flames reported coming from the exhaust. Cockpit filled with smoke after take-off. PAN declared and a/c returned.	During power checks the engine stopped with excessive back pressure applied to the throttle. The engine idled without issue when normal pressure applied to the throttle. Upon restart a company a/c reported flames from the exhaust. A/c commander decided this was due to over priming. Power checks at various RPM settings, no signs of flames, slight smoke observed. As this was deemed consistent with normal operation of the engine at idle, commander elected to continue with take-off. At approx 200ft the cockpit began to fill with smoke. PAN declared and a/c returned. Fire services attended. Upon inspection no engine fault found, engineers suggest that a silicon lubricant used on the heating system had caused the smoke.		
201301618	12/02/2013	DE HAVILLAND	DHC1	Aeroplane	Fire during engine start.	During the second attempt to start the engine, a flame shot out from the exhaust and ignited the RH wing fabric. Engine secured, a/c vacated and ground crew extinguished the fire. Damage to fabric on wing and TE flap.		
201302208	01/03/2013	BOEING	747	Aeroplane	APU bay arcing damage found to APU generator power feeder cable and surrounding structure.	During routine 'C' Check inspection of APU bay, arcing damage was found to power feeder cable and surrounding structure where cable passes through the APU compartment firewall left bung. Ref/a cable bung appeared to have separated from its housing and moved forward, resulting in the ref/a cable contacting the structure. Significant arcing damage was evident. □ CAA Closure: Aircraft APU generator control and protection system (differential current fault protection) was detecting the chafe to structure and isolating the nr1 generator as per system design. Damage found during routine zonal inspection programme.		
201302445	10/03/2013	BOEING	767	Aeroplane	APU fire during boarding process.	APU started earlier than normal due to suspected problems with ground power. After approx 10mins medium density smoke seen in rear of cabin. Air conditioning packs and APU bleed valve immediately turned off whilst observing APU fault light and associated EICAS message. The ground crew reported a large plume of white smoke and a brief flame from APU exhaust. Fire services called to verify a/c safe for engineering to investigate APU which was subsequently made unserviceable. A/c released back to service.		

201303315	31/03/2013	PIPER	PA28	Aeroplane	Engine fire on the ground.	The a/c, with a warm engine from a previous flight, was parked unattended on the club apron when a member of the public observed smoke coming from the engine and alerted the aerodrome controller. Emergency services attended the incident and extinguished a small fire in the engine bay. No major damage and no injuries were reported.		
201303888	14/04/2013	SAAB	2000	Aeroplane	Hung starts due to APU failure. Fire and dense smoke observed from LH engine exhaust. Full emergency initiated.	During push back and starting engine nr2 the 'APU Overtemp' caution sounded and the APU carried out an auto shutdown. Crew cancelled the engine start as the engine was winding down due to lack of pressure from the APU. Crew restarted the APU and commenced to start engine nr1. The 'APU Overtemp' caution sounded again and the APU auto-shutdown. A/c towed back to stand. During the tow back to stand, ATC advised crew that smoke and flames had been observed. Crew concluded that this was caused by symptoms of a wet start. This was confirmed by ground engineer who reported fuel vapour coming from engine nr1. Crew ordered an air start machine and contacted LMC to inform them of the situation. Dry run of the engine was agreed and if satisfactory crew would perform a restart. During the dry motor run the hose connecting the air to the a/c burst and became detached. At this stage it was decided to disembark the passengers. After fire services arrived the crew liaised with them and their report confirmed both the flight deck indication and conclusion that the engine had experienced a wet start.		
201303961	15/04/2013	BOEING	777	Aeroplane	LH engine failed to start. A/c towed back onto stand.	Start aborted due to ground crew observing smoke and flames from LH engine during start sequence. Engine failed to start on second attempt. A/c towed back onto stand. Engineer found pneumatic starter failed with several broken metal pieces, pneumatic duct also broken.		
201305400	14/05/2013	AIRBUS	A319	Aeroplane	Nr2 engine tailpipe fire on engine start.	After pushback ground crew advised that there was a fire in the tailpipe of nr2 engine. QRH actioned and PAN declared for fire services. Flames extinguished but fumes persisted. Strong smell of oil in the cabin. A/c towed back to stand and passengers disembarked with fire services in attendance. Investigation under 201306667. Initial investigation suggests internal oil leak as the cause rather than fuel.		
201305898	24/05/2013	AIRBUS	A319	Aeroplane	UK Reportable Accident: On departure, engine cowlings unlatched. Significant damage and engine fire. One engine shut down and a/c returned. Passengers evacuated via emergency slides. 80 POB, no injuries. A/c	CAA Closure: <input type="checkbox"/> AAIB Bulletin 8/2015 ref EW/C2013/05/02		
201307207	19/06/2013	FOKKER	F28	Aeroplane	APU fire reported at 11nm final approach.	Pilot informed ATC that an APU fire had occurred which had been extinguished. A/c requested the presence of Airport Fire Services on landing. On inspection there was evidence of a fire however there was no fire present. A/c taxied to stand. Subsequent engineering report states that the fire bottle had discharged and the APU shut down. Reports from the crew stated that the APU had been operating permanently on, due to an ignition problem with the nr2 engine ignition circuit. The technical specialist believes that the fault may have occurred when the airbrakes were deployed on a fast approach, causing a negative pressure in the APU bay. If the bleed air off-take was leaking, hot air could have been drawn back from the APU system into the bay causing an overheat condition. All APU enclosure seals, as well as the fire bottle and squib, have been replaced. No fault was found in nr2 engine ignition system.		
201307802	25/06/2013	BAE	AVRO146RJ	Aeroplane	Serious Incident: Fire warning on nr4 engine. Emergency declared and aircraft returned. Fire due to fuel leak from a loose fuel nozzle and gasket that was found to be damaged by passing high pressure fuel. Subject to			

201308042	05/07/2013	PIPER	PA28	Aeroplane	Parked aircraft on fire.	Aircraft had been parked for approximately 2hrs following a training exercise. Original reports indicated 'something' leaking from the aircraft. On investigation ground staff discovered that there was smoke coming from the engine compartment/air intake. Fire services called, by the time fire service arrived at the aircraft flames were seen from the engine area. Once fire was extinguished the aircraft was towed to a remote area. It has been suggested by the pilot/instructor that the cause of the fire was possibly the starter motor.		
201309073	20/07/2013	DIAMOND	DA42	Aeroplane	Engine failure during climb. PAN declared.	During climb at 700ft a noise was heard from the LH engine and ATC reported observing smoke from the same engine. As instructor took control of the aircraft a flame was seen for a brief period followed by dark black smoke. LH engine shut down, PAN declared and aircraft made a normal single engine landing with fire services in attendance.		
201309283	25/07/2013	AIRBUS	A319	Aeroplane	Rejected take-off due to nr1 engine EPR indication.	During take-off roll just over 100kts amber crosses seen on nr1 engine EPR, accompanied by thrust variations and slight swing. Take-off rejected and aircraft returned to stand. Fire was observed by ground staff from nr1 engine. On inspection only residual smoke as expected after shutdown. Engineering despatched aircraft in accordance with MEL with N1 degraded mode.		
201310407	12/08/2013	MCDONNELL DOUGLAS	MD11	Aeroplane	Tug driver called ATC to notify them of flames coming from the rear engine.	ATC contacted the fire crews to attend the scene. They confirmed flames were coming from the engine so the flight crew released the fire extinguishers within the engine and the fire services also sprayed foam to the area.		
201310663	22/08/2013	BOEING	747	Aeroplane	Serious Incident: APU fire and passenger disembarkation, before flight. AAIB AARF investigation.	CAA Closure: <input type="checkbox"/> Shortly after the APU was started on the ground, the APU starter motor suffered a catastrophic failure causing it to shear from its gearbox mounting flange. The failure allowed hot oil to be released; the oil ignited and caused a fire in the APU bay. The flight crew shut down the APU, discharged the fire extinguisher bottle and ordered precautionary passenger disembarkation. The operator determined that the starter motor had not disengaged after the start cycle, and this caused the catastrophic failure of the clutch housing and flange mount. The failure allowed hot oil to be released from the starter; the oil ignited and caused a fire. The cause of the starter motor's failure to disengage could not be determined. The start contactor was determined to have operated normally, but had been the cause of previous starter motor failures, therefore, as a safety precaution, the operator decided to embody the Manufacturer Start Contactor Service Bulletins applicable to all aircraft from this manufacturer. This is an optional modification which replaces the start contactors with a new design. AAIB Bulletin 05/2014, Ref: EW/G2013/08/38.		
201310735	26/08/2013	BOEING	737	Aeroplane	MAYDAY declared due to smoke and flames seen from LH engine during start-up after pushback.	The fire services were in attendance and the aircraft returned to stand.		
201311336	03/09/2013	PIPER	PA32	Aeroplane	Precautionary landing made following smoke and loss of power.	A burning smell was noticed which it was thought could have been due to a couple of fires on the ground. There were no indicated problems but the pilot thought it would be safer to head back towards the home base. Shortly after turning back, a significant amount of paint was seen peeling from around the oil filler door on the cowling. This was followed by a drop in power and a few seconds later the aircraft oil inspection door popped open. An immediate decision was made to land at the nearest airfield which was close by. On inspection, it was found that the exhaust had a hole blown in the top very close to the cowling. This had started to burn through the heat proof shield causing the paint to peel and the cowling to distort, thereby causing the oil inspection door to come open.		

201312506	23/09/2013	SOCATA	TB10	Aeroplane	Serious Incident: Engine fire on landing. Two POB, no injuries. AAIB AARF investigation.	CAA Closure: <input type="checkbox"/> On the late downwind leg to land, the pilot sensed that the engine was not running smoothly and had "missed a couple of beats". Carburettor heat had been applied, and he suspected carburettor ice might be responsible, so he executed a precautionary high approach. A successful landing was carried out but, as the aircraft came to a halt on the runway, the engine stopped and smoke could be seen emerging from the upper engine cowling on the right side. His passenger jumped out and could see a small fire coming from the underside of the cowling, which he quickly extinguished using the on board fire extinguisher. The cowlings were removed and a lot of sooting and fire damage could be seen. On switching on the electrical fuel pump, fuel could be seen pouring from the underside of the carburettor. The maintenance organisation visited the aircraft two days later and removed the carburettor, which they took back to their workshop for testing. They were unable to reproduce the leak and a strip inspection did not find any defects. They believe that a transient case of the float sticking may have caused overfuelling of the carburettor. AAIB Bulletin 04/2014, Ref: EW/G2013/09/12.		
201313493	18/10/2013	DASSAULT	FALCON2000	Aeroplane	Engine fire on start up.	Flames were seen emitting from the LH engine on start up. A ground incident was declared and once the fire services were in attendance, the engine was started again and flames were seen once more. Aircraft shut down. The aircraft had been in for maintenance the previous day.		
201313675	24/10/2013	BAE	AVRO146RJ	Aeroplane	Serious Incident: Engine fire during power assurance checks. AAIB AARF investigation.	CAA Closure: <input type="checkbox"/> During a power assurance check on the No 3 engine a fire warning appeared approximately three minutes into a full-power soak period. The presence of an engine fire was confirmed by maintenance staff outside the aircraft and the operator shut the engine down, pulled the fire handle and vacated the aircraft. The fire had extinguished prior to the arrival of the emergency services. The fire was caused by the ignition of fuel leaking from fittings between the fuel supply lines and manifolds. AAIB Bulletin 04/2014, Ref: EW/G2013/10/19.		
201314033	31/10/2013	BOEING	747	Aeroplane	Tailpipe fire during nr3 engine start.	Nr3 engine failed to start, temperature began to rise with a maximum of 546deg. Ground crew reported that engine appeared to be on fire, sparks and flames were coming from the engine and a side panel had blown open. QRH actioned and ATC informed. Fire services attended and when the aircraft was cleared it was towed back to stand and passengers disembarked. Engineers removed starter motor and it appeared that it had failed during start. Ground crew reported flames had shot out the back by up to 8ft. <input type="checkbox"/> CAA Closure: <input type="checkbox"/> Starter failed on 31 Oct following a crash engagement at 30% N3 following a tail-pipe fire. It is recommended that the starter is engaged below 20% N3. It is unclear if the tail-pipe fire was initiated by a failing starter, or the starter subsequently failed due to the crash engagement. Engine changed.		
201314834	17/11/2013	BOEING	777	Aeroplane	Flames reported from APU tailpipe as aircraft taxied onto stand.	The APU was started as the aircraft approached the stand. When the aircraft stopped, the APU was still accelerating past 20% so it would seem that it had not started first time but then continued to start and run satisfactorily. Ground staff reported that flames 3ft long had been seen briefly coming from the APU tailpipe as the aircraft turned onto stand. Engineers informed. Investigation under 201316550.		
201315192	23/11/2013	PIPER	PA28	Aeroplane	Possible engine fire on start up.	Engine primed but failed to start, waited 1min and re-primed. Engine turned over again and once more failed to start but this time smoke was observed coming from under the engine cowling. No flames were seen at any point. The master switch and fuel were turned off and the aircraft abandoned. Fire extinguisher discharged under the cowling and emergency services attended, no action was required. Engineering assistance sought.		
201315215	24/11/2013	BOEING	767	Aeroplane	Sparks from nr1 engine during pushback.	Service cancelled following sparks seen coming from nr1 engine. Aircraft returned when sparks were seen by pushback team coming from the nr1 engine. Engineering were unable to complete the work within crew FTLs. Service cancelled. <input type="checkbox"/> Supplementary 25/11/13: <input type="checkbox"/> Myself and my colleague were allocated to push the aircraft and when we had pushed into the middle of the taxiway, we were awaiting for 'clear to disconnect' instructions when the Captain said he had a technical fault. At that very moment, I noticed sparks from behind the blades on the LH engine. We stayed with the aircraft whilst F/D liaised with engineering we were then informed to clear to disconnect.		

201315650	02/12/2013	AIRBUS	A319	Aeroplane	Lightning strike in descent followed by fuel fumes in flight deck and passenger cabin.	During descent encountered lightning strike. ON WX radar only green and yellow returns and no activity observed/reported before. After lightning strike all systems normal, uneventful landing. When switching APU bleed on and switched ENG1 off moderate to severe fuel vapours smelled by crew members in the cockpit and forward cabin. APU switched off and Fire Service requested (precautionary). Smell went away within 1 to 2 minutes. Smell Form and Tech Log entry made accordingly. Small fuel spill observed along ENG 1 but spillage would be too small to cause the smell. After 15mins fire service released, no visible signs of fuel leak. Maintenance checking A/C for lightning strike (found entry point on ENG2) and burn marks.		
201315839	05/12/2013	BOEING	747	Aeroplane	PAN declared due to nr3 engine fire.	On base leg to final EICAS warning 'ENG FIRE 3'. ECL actioned and one extinguisher bottle was fired into the engine which put out the fire. PAN was declared and the aircraft was met by fire services on the runway for inspection. □ CAA Closure: □ Pressure test of each of the three fuel manifolds identified a leak in the inner ring. Due to a similar incident previously, the engine manufacturer issued SB72-0107 to remedy the event. The engine suffers from a "bowed rotor" condition that causes engine vibration during start and it is thought that this can cause this kind of fault. Tests indicated a leak from the upper manifold, inner tube (Psec). P/N 2419M11G01 Leak isolated to the region adjacent to the 2nd spacer block. NDT testing showed crack along brazed joint. No evidence of dimensional issues was found. The engine and aircraft manufacturers currently have a manual procedure released to help reduce bowed rotor start vibration levels. It was noted that this engine had operated for quite a long time prior to introduction of this manual procedure. The engine manufacturer have just released new EEC software which adds a second dwell to the start cycle prior to fuel on and engine start. Continued monitoring continues.		
201316662	23/12/2013	SIKORSKY	S92	Helicopter	A/c declared PAN due fire warning. Aircraft returned.	HKS37E was outbound at 3000ft at 099R from airfield declared a PAN due to engine fire and requested return. Initially direct track for SVFR given at 2000ft but crew then opted for a single engine ILS due to deteriorating conditions. □ Supplementary 14/01/14: □ Following a weather delay aircraft was ready for passengers with APU running with engines shut down. The FIRE/Armed push button was continuously illuminated. APU shut down and battery switched off, APU switched on again but button still illuminated. Humidity suspected and aircraft brought into hangar. Following departure at 3000ft Fire press tone light flickered. After approx 20mins with 60nm to run the Master Warning Fire caption illuminated with associated Eng nr1 fire caption and audio tone. This lasted for approx 2secs before extinguishing. Decision made to return. The nr1 engine fire caption and audio tone then returned and remained on continuously. Engine nr1 showed no sign of fire so was shut down as not required for return flight. Fire warning remained despite engine being shut down so engine fire extinguisher discharged, fire warning remained illuminated but crew still confident there was no fire. Fire warning self extinguished a short time later. Flight continued to landing with no further incident. Initial investigations have suggested that the cause of the fire warning was water ingress during the weather delay prior to initial departure.		
201316826	29/12/2013	FOURNIER	RF6	Aeroplane	Suspected engine fire at holding point.	Pilot reported "We have a problem, a bit of a fire" whilst at the holding point prior to departure. Aircraft ground incident initiated. Aircraft shut down and crew self-evacuated before RFFS reached the scene. Operator reported a suspected oil leak. Aircraft towed to maintenance.		
201400267	05/01/2014	BAE	JETSTREAM4100	Aeroplane	Starter motor cable had burnt out.	On stand with engines running requested the attendance of the AFS for an electrical problem as a precaution. Crash alarm activated and a Ground Incident instigated, 19 POB. Fire service in attendance, pilot advised to contact rescue leader. Rescue leader advises it is a starter motor problem. Outside Services stood down. AFS confirm the cable to the starter motor had burnt out.		
201400270	08/01/2014	BOEING	777	Aeroplane	APU exhaust fire during taxi in to stand.	During taxi in, flames reported from APU exhaust during APU start when approaching stand. PAN declared, aircraft stopped, APU shutdown. Fire service attended, no further abnormal signs; taxied onto stand with fire service in attendance until all passengers disembarked. Very useful comms from company aircraft behind us who observed flames and kept us informed.		

201401975	14/02/2014	BOEING	767	Aeroplane	Smoke and flames were seen coming from the LH engine tail pipe as the thrust reverser was deployed after touchdown.	During landing in very strong winds, the aircraft touched down and deployed the thrust reversers, a large amount of smoke was observed coming from the left hand engine along with flames from the tail pipe. On arrival on the apron the pilot was informed and he reported that he had also been told this by the Tower. At the start of my shift I was informed of this by the team who met the aircraft, I was also informed by the PET that there is an incoming maintenance file for high oil consumption, with this in mind I looked to clarify what had been entered into the Tech Log as the oil leak could be a contributory cause of the flames but nothing exists in the log for the engine fire on landing. I have now telephoned the Tower and they have confirmed that "the aircraft was informed that flames were seen from the left hand engine on reverse thrust, pilot informed, runway inspected, nothing found". CAA Closure: □ The organisation has concluded its investigation. Due to the reports of tailpipe flames during landing and the strong wind conditions, it was suspected that an engine surge or stall may have occurred. AMM post-surge checks were carried out with nil findings. The aircraft history was reviewed and there have been no previous or subsequent surges or stalls. This engine does have a history of high oil consumption - this can cause smoke to be seen from the engine exhaust, particularly after engine shut-down which is caused by a small quantity of oil from the HP/IP bearing compartment that escapes when the air pressure that seals the bearing decreases as the engine shuts down. Comprehensive troubleshooting actions have been performed to address the high oil consumption but have not improved it. As a result, the engine is planned to be removed to perform additional inspections and troubleshooting tasks. This event is assumed to have been a surge or stall on landing. No engine defects have been identified which would cause a surge or stall and there are no other similar events in the engine history, so it is most likely that the strong wind conditions at the time of landing were the cause.		
201402556	02/03/2014	EMBRAER	EMB145	Aeroplane	APU fire during maintenance.	APU trouble shooting wrt ADD B71 as requested on 2/3/14. During troubleshooting the main fuel solenoid was replaced due to the nature of the APU ops i.e. start it off, 20% RPM followed by APU auto shutdown. After replacing the solenoid an APU start was initiated. At 20% RPM and approx 500oc auto shut down occurred. The Engineer carrying out the leak check observed flames leaving the exhaust and 6 inch flames on top of the combustion area of the APU via the access door. The APU extinguisher was discharged and the fire service called. The fire extinguished as soon as the fire extinguisher was discharged and the fire service confirmed the fire was out.		
201402867	09/03/2014	BOEING	777	Aeroplane	Lightning strike damage found after inspection.	Aircraft came to Tech late afternoon of Saturday 08 March, for lightning strike inspections. The inspections were carried out and the A/C declared serviceable at 05:11 on 09 March. The handover required the aircraft to be removed from hangar to a stand once one became available after 07:00. During the tow from the hangar to stand TA6, further lightning strike damage was found. Nr 2 L/H Duct aft edge displayed evidence of lightning strike exit damage - blackening and disbond/delamination. In addition, minor fastener damage was found at three locations on the fuselage. The aircraft was withdrawn from service for repairs.		
201403389	21/03/2014	GROB	G115	Aeroplane	Smoke issued from engine on start up.	Taxiing from Main Apron to holding point "A", aircraft engine stopped. Instructor attempted a restart and a small amount of white smoke issued from the exhaust. Instructor attempted start a second time. White smoke again issued from exhaust, but much thicker. Moments later the Instructor announced that there was smoke in the cockpit and they were evacuating the aircraft. RFFS alerted by crash alarm and, by the time the outside Emergency Services had arrived, the Airport Fire Chief had confirmed there was no fire and no danger of further fire. Outside Emergency Services were stood down and the aircraft was pushed to the engineering hangar. Incident ended at 1039. Supplementary 21/03/14: □ The incident was an induction fire (backfire) so essentially an over primed (hot engine) resulted in excess fuel in the induction system. Not essentially a fire as such as it was contained in the induction system but the backfire caused an air filter to partially melt. It would be seen as a puff of smoke so from the pilots perspective assumed to be a fire, hence the shut down. The filter was changed and aircraft is fully serviceable.		
201403597	27/03/2014	BAE	AVRO146RJ	Aeroplane	Engine fire as aircraft was lined up on runway. Slide evacuation carried out. 78 POB, three suffered minor injuries during evacuation.	CAA Closure: AAIB downgrade to 'Non-Reportable' from AARF investigation. No further investigation to be progressed by the AAIB.		
201404336	09/04/2014	AIRBUS	A330	Aeroplane	Engine smoke and fire indications from nr2 engine on taxi in. Subsequently confirmed to be normal 'oil misting'.	Advised of smoke on taxi in from ATC Ground. Fire Vehicles dispatched for inspection. From Fire Commander advised indications of fire from No2 engine smoke getting worse. In coordination with Fire Commander decision made to shut down both engines. Subsequently it was reported that smoke was dissipating. Engine 2 fire loop fault came up on ECAM before shutting down. Crew brought to station and stood down subsequently. Passengers disembarked through L4 in situ at holding point C. From the Fire Commander: Water was discharged into the front of both engines, LH engine 150LPM 20 Bar, approx. 75 litres whilst engine was running. RH engine 10 Seconds at 7 Bar via 40mm hose. CAA Closure: □ Following investigations, it was concluded that the "smoke" observed was actually oil mist, consisting of minute droplets of liquid oil, not smoke or any other combustion by-product. This is perfectly normal for the T700 engines and is known as breather mast emissions. Information on this is captured in the Rolls Royce Notice to Operators No.033 and ATRs Technical Instruction T1.00104. The crews did advise ATC of this stating that "venting from the collector tanks in the engines which produces a very white smoke". Unfortunately this message never reached the Fire Crew. This was verified via the		
201405283	29/04/2014	BAE	AVRO146RJ	Aeroplane	Serious Incident: Fire on nr2 engine. Flight crew extinguished the fire and the aircraft returned to departure airport. Subject to foreign Authority investigation.			

201406991	01/06/2014	PIPER	PA28	Aeroplane	UK Reportable Accident: Engine fire on start-up. Two POB, no injuries. AAIB AARF investigation.	CAA Closure: <input type="checkbox"/> The pilot made three unsuccessful attempts to start the engine before smoke and then flames were seen coming from the cowling. The Airport RFFS responded and quickly dealt with the fire, which was thought to have been due to over-priming during the start attempts. The aircraft operator conducted an investigation into the incident, aided by CCTV footage which showed the multiple start attempts that culminated in the engine fire. A technical investigation found no evidence of engine or component malfunction and it was suspected that the fire was the result of over-priming. The investigation recommended that the pilot receive refresher training, to cover all aspects of the private pilot's syllabus, but specifically emergency procedures and pilot actions in the event of an engine fire. On completion of the training, the pilot would be required to complete a check flight before being approved to hire the organisation's aircraft once more. AAIB Bulletin 09/2014, Ref: EW/G2014/06/11.		
201407335	07/06/2014	AIRBUS	A321	Aeroplane	Rejected take-off due to engine stall.	I was working as the Air Controller, with runway 15 in use. At 13:32 I lined aircraft up from "A1", I also re confirmed the Orcam squawk at the request of the pilot. At 13:33 I cleared aircraft for takeoff, I observed the start of the roll. At 13:34 I observed aircraft hard braking just after holding point "B", with smoke coming from the right hand under carriage. The pilots communicated that they had stopped their take off run. I replied asking if they required assistance, they responded that they would call me back. I called for any Ops vehicle on frequency. Checker was at "S1", I instructed him to enter Rwy 15 to vacate at "T1", to go to "A1" for an immediate runway inspection. I called the AFRS to give them a "heads up" that the aircraft was on the runway but hadn't declared an emergency. A further conversation with Checker resulted in him going along the runway to pass down the left hand side, I warned the pilot. The pilot requested a visual inspection of the engines and undercarriage by Checker which I passed on, Checker was happy to do it. At his point a decision in the VCR was made to call out the AFRS, as they are trained to do inspections and having seen the smoke (hot brakes) from the brakes I felt it would be prudent. At 13:38 GMC declared an AGI. I called Fire 1 to expedite the AFRS to the aircraft On Runway 15 stopped between "B" and "RAP 1". Fire 1 told me his plan which I agreed to and cleared the Fire vehicles onto Runway 15 at "B" and "T1". I advised the pilot of the plan and to expect to contact Fire 1 on 121.6. At some stage I was asked by the pilot to let him communicate with Fire 1 on my frequency which I allowed. The aircraft was requested to shut down his engines, 1, the right hand engine was shutdown and the left hand was then shutdown. The pilot informed me that the aircraft was now immobile and would need a tug to tow him off the runway. He also told me the reason for the abort, the engine stalled. I requested the Ops Department to inspect all relevant taxiways as well as the runway due to the nature of the abort due engine troubles. Aircraft was towed off runway 15 via "T1" to stand 71. As the aircraft vacated the runway the runway was declared as open and handed back to me having been visually inspected. At 14:02 I transmitted that Runway 15 was open and normal operations resumed. 14:07 AGI stop declared. <input type="checkbox"/> Supplementary 7/6/14: <input type="checkbox"/> During take-off roll approx 110kts repetitive 'thud' heard from engine followed by yaw to right. Aircraft stopped on runway. During emergency stop ECAM displayed "Engine 2 stall" and "Eng 2 overheat limit". Both engines shutdown on runway at request of fire service. No signs of fire or damage. Aircraft towed back to stand. Passenger video of take-off shows bursts of flame from No2 engine exhaust. On inspection of engine engineers found deposits of rubber in front and behind fan. ATC advised and ops vehicle collected rubber deposits from runway. <input type="checkbox"/> CAA Closure: <input type="checkbox"/> The engine stalled/surged at 110kts during the take-off run. The aircraft stopped on runway with no signs of fire. Airfield ops suspected debris ingestion as there were chunks of rubber on the runway and some small pieces of rubber were found behind the fan blades. Initial investigations by line maintenance via borescope inspection of the high pressure compressor revealed extensive damage to the HPC blades, with damage found from stage 6 - 12. The worst affected stage appeared to be stage 7. The engine was removed from the aircraft and sent to the manufacturer for further investigation where the damage found by line maintenance was confirmed. A single stage 6 vane was found to be liberated from the root and this vane sits between the STG 6 and 7 rotors. The STG 6 vanes were quarantined and will be sent for further investigation. It was highlighted that in a 2006 NMSB V2500-ENG-72-0528, certain engines were believed to have been fitted with a bad batch on STG-6 vanes. However, the subject engine was never in the affected serial number range. The operator is waiting for the results of the investigation to determine the exact cause of the engine failure. No obvious signs of FOD were found on the initial tear down but lab investigation will be required to confirm this.		
201409886	22/07/2014	PIPER	PA28	Aeroplane	MAYDAY declared and forced landing carried out on beach due to engine fire.	MAYDAY declared at 14:57 pilot reporting an engine fire and stating he was returning to departure airfield. I gave the aircraft a steer to return and telephoned the airfield to advise them of the situation. The pilot then reported that he may not be able to make it back to before stating that he was making a forced landing on a beach at his actual location was approximately 5 miles to the West of where he stated. D&D were advised and the airfield was kept up to date with the information. The pilot telephoned the unit a short time later to state that the aircraft was safely on the ground and that all three passengers were safe. (ATC Investigation Report received). <input type="checkbox"/> Supplementary 26/07/14: <input type="checkbox"/> 22nd of July, I was flying the aircraft on a private general aviation flight with two friends. The aeroplane was in a serviceable condition having undertaken a 50 hour check on 18th July 2014. The aircraft was being ferried. The aeroplane had a thorough visual inspection of the engine under the cowling, the airframe, control surfaces and instruments as per the POH. <input type="checkbox"/> The aircraft had been fully fuelled before departure and had an oil reading of eight. The aircraft was started at 15:40 local time and proceeded to taxi to runway 22 via taxiway Alpha and held short at alpha for a longer than usual engine run up as the aeroplane had not been flown for two weeks, the magnetos and carb heat was checked and the RPM drop <input type="checkbox"/> was as expected. Due to the OAT and TOM, I expected a slightly longer take off run than usual which occurred, the RPM of the engine was 2350 which was usual, on handover to Radar, I reported passing roughly 1400ft for altitude 4000ft. Moments later the rate of climb was reduced, I called ATC and announced that we were maintaining 2000ft for the time being and levelled off with the intention to see if the air speed increased. At that time we were over the bay on a direct line track with the CPT VOR at 2000ft. Within seconds of levelling, we received rough running on the engine and carb heat was applied, an RPM drop of 300RPM was noted which was higher than normal, after a few seconds I decided to return to the A/D, before I could turn back and notify air traffic, a spray of oil was appearing on the windscreen on the right hand side and then grey smoke started coming out of the air vents in the cockpit, a MAYDAY call was made 15:50 roughly and we were told the airfield was in our 12 o'clock at seven miles (we had made a 180 degree turn), we could not make the airfield. Servo rough running and major oil leaked out about 1.5miles from the shoreline and we elected to land on the beach. An uneventful landing was made at 15:55 with no damage to aircraft or passengers. <input type="checkbox"/> Supplementary 25/11/14: <input type="checkbox"/> NATS Investigation Report received. <input type="checkbox"/> CAA Closure: <input type="checkbox"/> Operator advised that investigation identified failure of a crankshaft oil seal as the prime cause of event. Root cause of the failure could not be identified, but the engine had a reported history of oil leaks. Aircraft and engine were subsequently sold and withdrawn from service, therefore no further investigation practical.		

201411014	13/07/2014	BOEING	777	Aeroplane	Nr1 engine fire just after take-off.	During take-off, thud noise was heard. LH engine EGT exceedance. At around 400ft, flames from LH engine reported. Aircraft returned to an overweight landing. Preliminary investigation revealed damage to Stage 5 and 6 of LPT blades.		
201411239	15/08/2014	BOEING	737	Aeroplane	Engine tailpipe fire during push-back.	On starting engine #2 initial indications normal then EGT rapidly accelerated towards max EGT. Engine shutdown and QRH actioned. Ground crew reported 'Engine Fire #2', no fire indications in flight deck. Fire services requested from ATC and cabin crew contacted. Situation assessed and tailpipe fire most likely explanation, with no smoke in Cabin or further fire from Engine. When aircraft was deemed safe by fire services, aircraft towed back onto stand. Crew and passengers kept informed of situation. Passenger reaction was fine, with the exception of a few who had witnessed the fire.		
201411758	22/08/2014	SIKORSKY	S61	Helicopter	Go-around flown due to Nr1 engine fire warning on approach. Aircraft returned.	On approach to a grid, the fire warning lights on No 1 Engine illuminated and the tone sounded. Actions carried out iaw SOPs and a go round initiated. The aircraft returned.		
201412201	30/08/2014	BOEING	777	Aeroplane	Boroscope port plug found on the bottom of RH engine cowl.	Work request #2 engine boroscope. On opening left hand D duct debris was noticed falling from cowl. Once opened boroscope port plug was found resting on the bottom of right hand cowl. On inspection of left hand D duct approx 2 foot square hole burnt through fire protection inner liner at 10 o'clock VFA with honeycomb exposed. Boroscope plug found to be missing from location exit of combustion chamber /stage 1 HPT. Propulsion called and attended. No evidence of damage to boroscope plug threads or port threads noted. □ CAA Closure: □ The investigation failed to show any installation anomalies other than the MO not performing the operator's internal requirement to torque tighten the boroscope plug beyond the AMM requirement. This had not been communicated to the organisation. Root cause was found to be suspect hardware, failure of the boroscope plug retention fingers or threads. The MO has photographic evidence of boroscope plug Q in situ at engine dispatch but does not satisfy the question of the torque value used during installation, however the paperwork has a signed task stating the boroscope plugs were torqued iaw the AMM. The torque wrench used was identified by serial number, and has the correct range of torque required and was in date calibration. As remedial		
201413264	17/09/2014	AIRBUS	A320	Aeroplane	Aircraft struck by lightning during descent.	On descent aircraft passed through a cloud and then a lightning strike occurred. No lightning was seen in the area before the event. It appeared to be more of a large static discharge similar to what builds up around the windshield. Engineering found some burn marks to the number two engine. Ops swapped our aircraft for the return sector back.		
201413312	22/09/2014	AIRBUS	A320	Aeroplane	Nr1 engine 1 fire during start up.	During pushback and performing normal start on engine 1, headset operative reported flames/sparks coming from right hand side of engine 1. No indications of fire on ECAM. Engine start aborted and a/c towed back onto stand. Engine start aborted, tailpipe fire drill carried out as precaution to purge engine but this reignited the flames/sparks so drill stopped. No adverse pax reaction. Engineering investigation revealed a damaged bearing from #1 starter motor. Unit changed, engine run carried out with fire service in attendance - no leaks or signs of fire evident. Engine considered serviceable for normal operations.		

201414590	15/10/2014	AIRBUS	A320	Aeroplane	Momentary flash of flame from APU exhaust due to wet start.	Starting the APU on the ground, a wet start occurred, and the handling agent witnessed momentary flame from the APU exhaust. No cockpit fire warning, but as a precaution, the APU was shut down immediately upon instruction of the handling agent. APU and surrounding area checked for visible signs of fire, leak and or heat scorching. All found normal. Flame was reported from central part of exhaust only. No fire fighting personnel attended and at no time was the situation considered an emergency. MOC were consulted, APU parameters remotely checked and the cause was considered a wet start with fuel pooling. Attendance of engineering personnel was considered unnecessary, and cleared for normal Ops whilst monitoring all indications. Engineering support was put on standby in the event of further problems. As expected subsequent start was normal with all parameters within normal range. APU started with Captain monitoring externally. Both Pacs were selected ON to place APU under high load, and further parameter checks carried out, all satis. All further operations concluded without further event, including the next APU start. Entry in Tech Log made as foreign CAA in attendance (Agent called them) and requested an entry made. White copy of tech log given to CAA. Tech Log text: "FOR INFO - During start of APU Visual flame from rear of A/C. No warning in cockpit. APU shut down. MOC called and ACARS checked for abnormality. APU subsequently Sats. Considered pooling of fuel. A/C continued as Norm". - MOC were advised re the FOR INFO entry via ACARS at 12:20. MOC acknowledged at 12:46 SATIS and engineers informed. On arrival checks carried out by engineers, and tech Log cleared.		
201414823	20/10/2014	AEROSPATIALE	AS332	Helicopter	PAN declared due to engine Nr2 fire warning indication during cruise. Warning suspected spurious.	On duty as radar controller. Aircraft was approx 23 miles east of airport cruising at 3000 feet en route. They called PAN PAN due to a engine no.2 fire indication. They turned back and made a VFR approach without further complications where they landed safely at time. The crew believed the fire indication to be spurious.		
201416119	15/11/2014	BOEING	757	Aeroplane	APU battery ground terminal and bracket found burnt and corroded.	During scheduled maintenance inspection, insulation blankets around APU battery ground terminal were found burnt. On further inspection, the terminal lug, lower screw and bracket were all found overheated/melted. This occurrence is specified in FAA AD 97-15-09. Non-routine work card has been raised to rectify the defect during the aircraft maintenance input. □ CAA Closure: □ The aircraft manufacturer was notified of this occurrence. The possibility of escalating the re-inspection time limits was found not required as the issue is not thought to be a regular occurrence. Review of similar events being evaluated and if a trend appears re-issue of the QAN to be considered and also the MPD inspection periodicity to be reduced.		
201416317	21/11/2014	EMBRAER	EMB121	Aeroplane	MAYDAY declared and diversion initiated due to engine fire.	Aircraft was at FL215 climbing FL250 routing toward LIZAD dest. His position was 60nm NW when he called Mayday right engine fire and requested immediate diversion. The pilot changed the squawk himself to 7700 and the tactical gave the aircraft routing to alternate. I notified the LAS then called alternate to advise the Mayday call, they requested the aircraft be descended to 3000A on QNH 1013 and transfer to 133.4, I was also asked to obtain POB which was 2. A second Tactical controller plugged in and brought the emergency checklist to our attention which we then checked through to ensure we had carried out the best actions. The tactical descended the aircraft to 3000A and continued to provide range and bearing information. □ Swanwick Mil Sup advised D&D and RAF of the Mayday aircraft S9 Assistant advised Brest of the diversion. The tactical asked if the pilot could accept a frequency change which he could and the aircraft was transferred to approach around 50nm DME the airfield. I called alternate to advise we had not passed the weather to the pilot and asked if he had checked on frequency which he had. Shortly afterwards I was relieved from my position.		
201417213	11/12/2014	EMBRAER	EMB121	Aeroplane	MAYDAY declared due to engine fire. Fire was extinguished, engine shut down and aircraft diverted.	Aircraft declared MAYDAY whilst climbing to FL270 and stated he was descending to FL120. By the time I phoned TC cap to notify them he was already squawking 7700. Asked them if FL120 was ok they said yes. Pilot stated it was an engine fire as I was on the phone. TC cap phoned TC south and came back to me to tell me their frequency. The pilot asked to be diverted to a nearby airfield and my TAC put him on an appropriate heading. Coordinated again with TC and s17. The pilot then informed us that the fire was no more that they had shutdown n0.2 engine and would like to divert to an alternative airfield. After coordination with TC and s17 the a/c was transferred to 128.425		
201417479	16/12/2014	DE HAVILLAND	DHC8	Aeroplane	Serious Incident: In-flight shutdown (IFSD) due to low oil pressure in nr1 engine. Aircraft diverted and emergency evacuation carried out after landing. 80 POB, no injuries reported. Subject to AAIB Field investigation.	Fire crew extinguished residual fire in nr1 engine after landing.		

201417680	18/12/2014	AGUSTA		Helicopter	PAN declared due to engine nr1 and baggage bay fire warning, suspected spurious.	<p>I was ADI when radar called to inform me that aircraft had declared a PAN with engine fire warning no1 engine and the engine had been shut down. A FULL EMERGENCY was declared. Departures were stopped and an inbound VFR aircraft was routed to a VRP to hold. A visual approach was flown and when at approx 5nm to run the Captain spoke to the Fire Commander on frequency to inform him of the situation. The aircraft landed safely and the fire service followed it to shut down on the apron. The incident was terminated and following a runway inspection normal operations were resumed. □</p> <p>Subsequently the radar controller informed me that he had monitored frequency and that the pilot thought the warnings may have been spurious. □</p> <p>Supplementary 18/12/14: □</p> <p>No1 Fire Audio plus associated CAS warning, but no indication on Fire Control panel. Camera checked. Fire warning was thought to be spurious. □</p> <p>Camera remained on. Engine left in Flight mode. Warning light on Fire control panel and Engine control panel both illuminated. Following the illumination of both warning lights, and having ensured that safe OEI power was set, the crew elected to follow the QRH drill for Engine Shutdown. Once the No1 Engine was placed in Idle, the Baggage Bay fire warning illuminated with the associated aural warning. Camera was checked, there were no indications of flames/smoke from the baggage bay area. Landing Gear lowered. Discussed the possibility of landing off-airport due to the possible baggage bay fire. Engine No1 shut down (crew reasoned that it could be a hot gas leak, and that this could possibly have contributed to the other warnings). PAN declared to ATC. Aircraft recovered to airport. The Baggage Bay Fire warning light stayed on steadily initially, and the Engine No1 Fire lights flickered on/off on the Engine Control Panel and the Fire Control Panel. Simultaneously the Baggage Bay Fire light, and its associated aural warning illuminated/sounded continuously. □</p> <p>CAA Closure: □</p> <p>Fault traced to nr1 and nr2 IOMs. Both items (P/N 8G4620V00151) were replaced and programmed. Operational test of both items carried out and terminal block TB379 (P/N A520A02WPN) also replaced as a precaution. Preliminary analysis of the nr1 Input Output Modile (IOM) highlighted signs of water intrusion. Subject raised of water infiltration in the bay where the IOMs are installed during engine or upper deck washing. Aircraft manufacturer requested test to look for water infiltration into the avionic bay whilst performing engine washing. During the test, which was observed from the aft engine nr1 bay, water was seen entering the LH avionic bay and then down into the lower bay where the IOMs are installed. Root cause determined as improper sealing between the flange and the draining pipe. Sealing was subsequently restored.</p>		
201417806	20/12/2014	SIKORSKY	S92	Helicopter	Fire caption illuminated due to APU wet start causing smoke and flames from exhaust.	<p>During an APU start, fire caption illuminated. APU shut down was initiated and the fire caption cleared. The APU had a wet start which caused a lot of smoke and flame from the exhaust. This may have caused the Fire Warning to illuminate. The exhaust pipe was removed and the power turbine inspected, NFF. A boroscope inspection was carried out with no damage evident. □</p> <p>CAA Closure: □</p> <p>Investigations found that the APU had had a wet start, which caused a lot of smoke and flame from the exhaust. This may have caused the 'Fire Warning' to illuminate. The exhaust pipe was removed and the power turbine inspected with no faults found. A boroscope inspection was carried out with no damage evident. Subsequent investigations found a faulty APU electronic sequence unit. APU ESU replaced, checks carried out and the aircraft returned to service.</p>		
201417939	23/12/2014	BOEING	777	Aeroplane	Smoke from nr2 engine during start.	<p>Smoke was observed by the push back headset operative during right engine start. He requested we cut fuel to right engine using the phrase "cut right engine". We had already observed the engine was slow to start initially this was put down to the time taken for engines to cool below 100* after quick turnaround however it was still slow to start once the fuel had begun to flow. We diagnosed a possible tailpipe fire and pilot flying (P1) called for "FIRE Eng tailpipe R". The FIRE Eng tailpipe R Checklist was actioned and a review completed. After consulting the engineer on the ground we decided to restart the right engine. The rest of the departure was uneventful. The Captain consulted with the Engineer that feedback should be given to the headset operative that it would be better to inform us of what he observes (in this case smoke) rather than requesting a shutdown, this was actioned by the engineer.</p>		
201417945	24/12/2014	AIRBUS	A380	Aeroplane	Serious Incident: Fire in pylon of engine nr4 after parking on stand. Extinguished with hand held extinguisher by AFFS. 404 POB, no injuries reported. AAIB AARF investigation.	<p>CAA Closure: □</p> <p>A small external fire was observed on the exhaust nozzle of the No 4 engine after shutdown; this was extinguished with a hand-held fire extinguisher. The passengers and crew disembarked normally. □</p> <p>Investigation by the operator found a fuel leak at the pylon Zone F fuel double-walled junction and the pipe intended to route any leaked fuel to an overboard drain was found blocked. As a result the leaked fuel, rather than being drained away, dripped from the pylon area onto the hot exhaust nozzle. □</p> <p>Based on information provided by the operator and the engine manufacturer, the aircraft manufacturer is in the process of issuing an Alert Operators Transmission to all A380 operators, requiring detailed inspections of the area to identify any anomalies. AAIB Bulletin 7/2015 ref EW/G2014/12/14.</p>		

201501630	02/02/2015	BOEING	787	Aeroplane	APU fire warning and auto shutdown on the ground. Conditional inspection not completed post APU fire event.	<p>APU witnessed an auto shut down during transit with fire bottle discharge due to APU fire. Defect transferred to ADD without AMM inspections being either completed or recorded as completed. Bottle discharged. Inspected area found possible cracked fitting on oil return line. 6 o'clock position fwd of oil cooler. Add raised for investigation on arrival. APU inop. 3 ea CBs pulled and collared on p49 panel. Parts Required: Mandatory inspections were called upon return; in addition to safety issues a delay was also driven into program to complete the inspections. □ Supplementary 12/02/15: □</p> <p>Fire APU (warning)- APU fire indication and auto shutdown observed on the ground during turnaround APU inspected at log ref AA5170, oil scavenge pipe at 6 o'clock position above oil cooler found leaking. Fire confirmed by evidence of sooting but nil structural damage observed. To add APU to remain locked out awaiting APU replacement. 3 of CB's on p49 panel tripped and collared as per DDG, VFSG systems operating normally. Aircraft to remain within ETOPS 180 minutes. □ CAA Closure: □</p> <p>Inspections confirmed that a fire had occurred and that there was evidence that oil had been leaking from the rear bearing oil tubes. The manufacturer had previously issued a Service Information Letter to advise operators to suspect failure of the rear bearing vent or scavenge tubes if there is a sudden increase in oil consumption. The APU installed on the subject aircraft had not demonstrated any sudden increase in oil consumption prior to the event and had not required an oil uplift for the previous 13 sectors. Two days prior to the event, the APU had suffered an auto shutdown with maintenance message 49-19501. The existing FIM task for this message indicates that it is a nuisance message and no maintenance action is necessary. The APU was restarted on this occasion without incident. The APU manufacturer has since advised that auto shutdowns of this nature can be indicative of a hung start due to turbine blades rubbing against the adjacent shroud. The operator has been carrying out routine borescope inspections of this APU type since October 2013 to inspect for early signs of first stage turbine blade movement (walking). The last such inspection had been carried out in December, at which time the inspecting engineer did not report any signs of blade movement. The borescope inspection was recorded during this inspection and the video was reviewed and shared with the APU manufacturer. The OEM noted that the angle of the borescope tip during the inspection was not well suited for the detection of blade movement and if blade walking had been present, it is unlikely that it would have been successfully detected in this instance. The APU was removed and sent for inspection and repair. The initial findings confirmed that the rear bearing vent tube had cracked and was likely to be the source of the oil, which moved onto the oil cooler and eventually ignited. Further inspection indicated that several of the first stage turbine blades had moved axially and rubbed against the adjacent shroud. This contact and subsequent material loss resulted in an imbalance during operation, causing high vibration of the APU and subsequent cracking of the vent tube and is a known condition on the APU type. Extensive discussion with the APU manufacturer and in-service data collection have failed to indicate how rapidly the 1st stage turbine blades will move once the blade retainers start to fail and there are multiple examples of low life failures and high life units with no signs of failure. As a result it is very difficult for operators to determine what units are at increased risk of failure. To reduce the risk of further occurrences, additional instructions have been added to the borescope inspection tasks already being carried out to improve the likelihood of capturing blade walking before it causes this type of failure. This includes the addition of recently released training material from the APU manufacturer and the instruction to record and save all inspections for review.</p>		
201501745	11/02/2015	AIRBUS	A320	Aeroplane	APU fire during troubleshooting procedure.	Aircraft was parked outside of hangar with the APU inoperative. Following the TSM 49-00-81-810-821-a, step (2) "purge the fuel line", we tried to start the APU. During start EGT rose until 600degC approx and 18%N. Also the guys at the back told me black smoke and flames came from the exhaust pipe. APU shutdown performed. No fire warning indication was in the flight deck. Tried to use before a foam extinguisher but hasn't enough pressure to reach the exhaust pipe from ground, finally flames extinguished with a CO2 extinguisher from the exhaust pipe using a Genie. Shift manager advised and fire service required with no further action. Troubleshooting still in progress.		
201504230	06/04/2015	SUPERMARINE	SPITFIRE	Aeroplane	Aircraft engine over-primed and subsequently emitting flames from the exhausts on start-up.	Following request for engine start flames seen emitting from the engine/exhaust, pilot not responding to radio transmissions, Aircraft ground incident declared and emergency orders followed. Crash CAT reduced to zero, commercial traffic held and instructed to shut down. Radar advised to hold off inbound traffic. Fire was extinguished and engine shut down, CAT 6 obtained from RFFS to allow commercial traffic to depart. Fire crews advised the engine had been over primed on start. Fuel spillage observed by RFFS and area cleaned up. Aircraft was later started successfully whilst fire crews were present.		
201504740	13/04/2015	PIPER	PA34	Aeroplane	Suspected engine fire.	Pilot Report: "During start-up of LH Engine, smoke appeared from the top of the engine cowling grill/vent. Crew immediately made emergency evacuation. Fire crew appeared on scene following call to ATC (Tower) by examiner. N.B. The LH engine is difficult to start and examiner had to intervene to try and get engine started. Starter Motor cooling times were adhered to at ALL times, having made numerous attempts to start."		
201506332	11/05/2015	PIPER	PA28	Aeroplane	UK Reportable Accident: Aircraft struck a fence during forced landing due to engine failure. Two POB, no injuries reported. Aircraft extensively damaged. AAIB AARF investigation.	<p>CAA Closure: □</p> <p>The engine failed shortly after takeoff and the aircraft was subsequently damaged during □ the subsequent forced landing. The instructor was uninjured and the student sustained □ minor injuries. On vacating the aircraft the instructor noticed that there was a fire in the right side of the □ engine compartment. The aircraft was extensively damaged. The engine mount was distorted and the engine fuel □ pipes and carburettor were damaged. The left fuel tank had been punctured and the nose □ and right main landing gear leg had broken. AAIB Bulletin 7/2015 ref EW/G2015/05/04.</p>		

201506675	17/05/2015	BEECH	36	Aeroplane	MAYDAY declared due to engine fire on apron.	I was the ADC on 17/05/2015 when the aircraft landed. The pilot taxied to the apron and parked as instructed. The a/c closed down and the persons (3) began to disembark. Two short transmissions were heard on 133.425, the first just the initial letter 'N', followed by the TX switch being keyed the second time without speech. As I looked out onto the apron to see who was trying to transmit, the pilot transmitted 'MAYDAY, MAYDAY, MAYDAY, a/c on fire'. I acknowledged the transmission and initiated the alarm, I directed RFFS to the stand, which was immediately outside the fire station. One person was seen to move away from the a/c, and a child jumped out of the door followed by a significant amount of smoke. A second child was seen running towards the fire engine. Two appliances were on scene at 1626. The crew commander removed the children from the scene. The RFFS found there to be little damage and terminated the incident.		
201507971	12/06/2015	EUROCOPTER	EC225	Helicopter	MAYDAY due to nr1 engine fire.	Aircraft was ground running on the apron, the pilot called a Mayday reporting an engine fire on number 1 engine. I initiated an Aircraft Ground Incident.		
201509171	03/07/2015	DE HAVILLAND	DHC8	Aeroplane	Flame from starboard engine exhaust.	Controller witnessed a flame from the exhaust of the starboard engine. Pilot reported no fire indications from the engine. Agreement from the pilot and AFS that the flame was more likely to have been from the APU.		
201509763	20/07/2015	BOEING	747	Aeroplane	MAYDAY declared due to tailpipe fire on shutdown following 'Engine Fuel valve 3' message.	Eng fuel valve 3 message on shutdown followed by brief tailpipe flame. As fuel control was already at cut-off the fire handle was pulled on advice from engineer on headset who was visual with the engine. Flame extinguished. Mayday declared until fire was confirmed extinguished by the fire crew. Fire crew remained in attendance until passengers all disembarked. Maintrol briefed on sat phone after event. No engine limits exceeded - max temp estimated 580C. □ Supplementary Rep 23/7/15 : □ On arrival during engine shut down at 2030 crew had EICAS 73755 eng 3 fuel press active and 73756 engine 3 Fuel metering unit shut off valve followed by a tail pipe fire flame observed by ground engineer Crew pulled the fire handle as cut off had already been selected and flame extinguished without blowing the fire bottles. Tail pipe fire checks actioned satis. Check start aborted due to large fuel leak reported, Engine fuel system visually inspected with no obvious defects and blown through and collector tank drained. Check start attempted but large amount of fuel again. FMU change required. Work party sent to investigate/rectify as this is an agency station. Subsequently have had verbal report from C&C that this engine had been shutdown on the fire handle prior to the service. □		
201509930	21/07/2015	GROB	G115	Aeroplane	Engine fire. Crew evacuated onto the runway and fire services deployed.	A/c using callsign TFY (Tayside) D17 had just landed following a circuit detail and was in the process of turning on the runway in order to backtrack to vacate when two large bursts of flame were observed below the engine in the vicinity of the exhaust. The airport fire service was deployed and the two crew of the aircraft were informed of flames seen and therefore safely evacuated the aircraft on the runway. No sustained fire was observed. Following inspection by the Airport Fire Service the aircraft was moved off the runway and subsequently taxied to maintenance by engineers. Runway was re-opened at 1237Z.		
201510145	21/07/2015	BOEING	777	Aeroplane	Engine Surge and Fire In the Test Cell.	During engine test, there was a report of surge and fire. Investigation to determine the root cause are in place.		

201511078	07/08/2015	BOEING	747	Aeroplane	APU Fire and Smoke.	The aircraft was prepared for pushback, including a top up of fuel. On clearance to push back the push back co ordinator announced that there was smoke and fire coming from the APU. The flight deck crew shutdown the APU and discharged the fire extinguisher. Fire service was called and was in attendance until an engineer declared the APU safe. The passengers were disembarked as the cabin temperature was rising quickly (+38 degrees), although GRD air was plugged in after 20-30 mins, this made little difference to the temperature.		
201511451	17/08/2015	EUROCOPTER	EC225	Helicopter	Engine Bay Fire On Ground.	Aircraft started for ground run (both engines). Engineer supervised start and then moved into the aircraft to perform engine vibes checks. Whilst waiting to start engine vibes check, pilot observed ground crew walking towards aircraft indicating that there was a fire associated with the number two engine. There were no cockpit indications relating to a fire. Pilot shut down aircraft immediately and informed the engineer in the back of the aircraft. Engineer opening the number two engine cowlings. A small fire was observed below the engine and extinguished by the ground crew. Company investigation underway		
201512394	03/09/2015	MBB	BK117	Helicopter	Nr2 engine aborted start. Fault traced to fuel valve assembly which was replaced.	During start of engine no 2, the selector was placed to idle, TOT raised to 40C then engine stopped. 2nd attempt the fire guard witnessed a flame from the exhaust pipe. Start was aborted. <input type="checkbox"/> Fuel valve assembly failed test. Replaced. No further fault. A/c returned to service.		
201512491	08/09/2015	BOEING	777	Aeroplane	Left engine fire. Captain reported left engine fire, fired two bottles, seemed to extinguish the fire, but then reignited. Called stop at 80kts and initiated an evacuation on the runway.	Investigation being carried out by NTSB.		
201512654	06/09/2015	PIPER	PA28	Aeroplane	UK Reportable Accident: Engine fire on start, damage unknown. Two POB, no injuries. Subject to AAIB AARF investigation.			
201513341	19/09/2015	PIPER	PA28	Aeroplane	UK Reportable Accident: Engine fire on start up. Three POB, no injuries reported. Damage to engine compartment. Subject to AAIB AARF investigation.			
201513622	17/09/2015	AIRBUS	A321	Aeroplane	C Duct damage caused by detached HP duct on nr2 engine.	On arrival, lower latch panel found opened. Further investigation, on Eng #2 Inboard C-Duct opening - The duct between I/P check valve and PRV was found detached and severe heat damage found the on inner barrel of I/B C-duct with damage also found on engine wiring looms in the area. <input type="checkbox"/> Supplementary Rep: <input type="checkbox"/> Quality investigation is ongoing, A/c had an open ADD for #2 engine fluctuating bleed pressure. This defect had been worked overnight prior to the flight that the damage was discovered on. The PRV clamps had been disturbed on this maintenance.		