Corporate Communications
External Information Services

11 July 2014
FOIA reference: F0001981

Dear XXXX

I am writing in respect of your recent request dated 27 June 2014, for the release of information held by the Civil Aviation Authority (CAA).

Your request:

> *"I would like a list of all MORs received by the CAA during the last three years in connection with the S92A helicopter".*

Our response:

Having considered your request in line with the provisions of the Freedom of Information Act 2000 (FOIA), we are pleased to be 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 (ANO) 2009. Each report made is reviewed and, where appropriate, further investigation carried out and action taken.

We have searched the UK CAA database for all occurrences that involve a S92 Helicopter regardless of nationality or location during the period 1 January 2011 to all processed reports as at 9 July 2014 and provided a summary of those reports. We have, however, removed identifying information from these reports as this information is exempt from disclosure under Section 44 (1) (a) of the FOIA.

Section 44 (1) (a) of the FOIA 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 ANO is prohibited from disclosure (a copy of this exemption can be found below).

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:-

Mark Stevens
External Response Manager
Civil Aviation Authority
Aviation House
Gatwick Airport South

West Sussex
RH6 0YR

mark.stevens@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 Freedom of Information Act to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner's Office
FOI/EIR Complaints Resolution
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF
www.ico.gov.uk/complaints.aspx

Should you wish to make further Freedom of Information requests, please use the e-form at http://www.caa.co.uk/foi.

Yours sincerely

Rick Chatfield
Information Rights and Enquiries Officer

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	UTC date	Make/mdl/srs [Model]	Headline	Narrative text
201100279	10/01/2011	S92	Ground crew unable to open airstair door upon arrival. Door jammed in locked position. Passengers disembarked through the emergency exit.	Investigation found the aft shoot bolt on the upper clamshell door had jammed. Shoot bolt found to be damaged due to a combination of wear and forcing the door locked when not fully closed.
201100305	11/01/2011	S92	During post flight inspection, rear RH main gearbox attachment foot was found cracked.	Further investigations carried out confirming the crack was from attachment bolt hole. Investigation progressed under 200909588.
201100691	22/01/2011	S92	Mandatory EASA AD of MGB mounting feet overran by 20mins.	Company investigation ongoing.
201100966	31/01/2011	S92	A/c entered unusual attitude low level at night over water during SAR training flight.	A/c rolled left as it switched to AHRS mode as expected but as trainee P2 was attempting to correct roll excursionsa/c violently entered an unusual attitude. Control eventually regained by P1 and a/c returned to base. Overtorque shown on HUMS. A/c manufacturer consulted. CAA Closure: Disorientation by First Officer who was undergoing first night low level SAR training sortie. Subsequent recovery resulted in overtorque. Operator has investigated and made a significant number of training recommendations.
201101891	19/02/2011	S92	Incorrect filter bowl nuts supplied.	A/c required new filter bowl housing nuts following removal of the filter bowl. Three nuts arrived with correct part number, but during fitment it was noticed that they weredifferent to the nut type removed. Other operators and supplier informed. Investigations ongoing with supplier.
201102119	01/03/2011	S92	Deviation from cruise altitude.	ATC advised a/c of QNH change. A/c coupled to nr2 side. Baro selected on nr2 DCP. With a single click the QNH changed from 1035mb to 990mb. A/c started to climb and associated audio warning heard. A/c de-coupled and levelled off visually/manually. Correct QNH set and altitude adjusted. A climb of around 250ft had taken place. Functional testing of the nr2 DCP was unable to reproduce the fault. The nr1 and nr2 Display Control Panels were interchanged and further functional tests carried out. No fault found. DCP replaced as a precaution.
201102374	09/03/2011	S92	Undercarriage failed to extend.	When the landing gear handle was selected down on approach, 'Hyd 3 Fail' caption illuminated and only the NLG locked down. 'Red' undercarriage unlocked light remained on. EOP's actioned. Landing gear extended using landing gear 'EMER DN' switch. Three 'Greens' illuminated. A/c landed safely. Nr3 hydraulic pump identified as probable cause and subsequently replaced.

201102416	07/03/2011	S92	Display control panel failure during cruise.	ATC requested a/c to maintain 3000ft. FD1 engaged with ALT and LNAV. When PF adjusted baro setting by one click, setting shot down to a lower figure with a/c entering a climb and 'check altitude' audio warning operated. ALT disengaged, a/c levelled and correct baro setting set. Crew managed to avoid an altitude bust by de-coupling quickly. Similar occurrences have happened recently, and could be due tothe DCP control knob becoming worn. CAA Closure: When the problem originally became apparent to the crews, they immediately began using a work around, where they would disconnect ALT before changing the altimeter setting and then re-engage ALT. Subsequently, they were asked to report alloccurrences of erroneous settings whether ALT engaged or not, to support a submission to the manufacturer. The rootcause was confirmed to be wear, or a similar malfunction,in the display control panel knob mechanism. The manufacturer has now been able to reproduce the problem and is expected to have a solution ready for certification around the end of April 2012. In the meantime, the disengagement ofALT before adjusting altimeter settings is the norm and the operator continues to request that crews report events,in case further evidence is required by the OEM.
201102548	13/03/2011	S92	On arrival, oil leak discovered from nr1 engine. Engine shut down for further inspection.	Inspections found starter drive shaft seal cut. Starter 'O' rings replaced.
201102560	09/03/2011	S92	S92A in cruise targeted by a green laser. Avoiding actiontaken. Visual discomfort experienced by crew. Local authorities informed.	
201103031	24/03/2011	S92	Excessive airframe vibration whilst levelling in cruise. A/c returned for engineering assistance.	
201103178	30/03/2011	S92	UK Reportable Accident: Pilot went to pull parking brake lever when marshalling onto stand but accidentally pulled collective. A/c became airborne and landed heavily. AAIB AARFinvestigation.	CAA Closure: The helicopter was ground taxied onto a parking spot and brought to a stop by the commander, who was the pilot flying. He then intended to apply the parking brake but inadvertently raised the collective control lever, which caused the helicopter to become airborne. He released the collective control lever, which was lowered by the collective trim system to the fully down position, and the helicopter landed heavily, causing damage to the landing gear and airframe. AAIB Bulletin 09/2011, Ref: EW/G2011/03/18.
201103370	03/04/2011	S92	Excessive vibration felt during departure.	Rotor track and balance actioned which indicated a/c vibration far exceeded operational limits. A large track splitwas also recorded. Engineering investigation noted that vibration levels had recently degraded suddenly but the HUMS computer had not flagged any warning. CAA Closure: Investigation Findings: Inspection of main rotor head (MRH) carried out with a review of VHM data. RED MRH damper replaced, ground run and flight tested satisfactorily. Aircraft returned to service. Manufacturer confirms MRH damper degradation is consistent with the symptoms reported and replacement cured the vibration issue.
201103512	04/04/2011	S92	A/c returned to base with fuel cap missing following refuelling.	Helideck crew had closed the hatch without putting the cap on.
201103513	06/04/2011	S92	PAN declared due to AC NR2 Fail caption illuminated together with AVC Degrade on short finals to land. Smoke also detected after landing. A/c shut down and towed to stand.	

201103687	12/04/2011	S92	AHRS VEL 1' and '2 DRGD' warnings due to military exercise GPS jamming.	During SAR training, 'Be alert, terrain inop' audio alertsounded, followed soon after by the illumination of the 'AHRS VEL 1 DEGRD' and 'AHRS VEL 2 DGRD' master cautions. After consulting the ECL, the FMS was recycled in an attempt to re-align the nav plot, but was unsuccessful. Militaryexercise, 'Limited GPS Jamming' (according to the NOTAM) was notified approx 30nm from a/c location. CAA Closure: The flight entered an area being 'jammed' due to a military exercise. Subsequent to CAA and military liaison, in allcases when GPS jamming is experienced and is causing problems with the a/c nav systems, a contact with ATC should be made to request that they relay to RAF Boulmer Master Controller, to 'cease jamming.' This advice had been disseminated to all crews that could potentially be effected by 'jamming' and information is now available on safety noticeboards. In the case of this particular base, when possible avoid scheduling training flights during these exercisesand in addition attempt to stay out of range of the effected area. Incident has been extensively followed up: Protocols are in place to ensure that SAR crews are able to request Cease Jamming from RAF Bulmer; There remains a suspicion that the AFCS of the S92 may well be affected during flight in an area where GPS jamming is going on however. During training sorties this should not present a hazard, however on a SAR op, it is essential that all jammming has ceased if the aircraft is likely to anter a notified area. There remains a concern that 'jamming' during a real SAR operation could cause problems, and the operator has been asked to confirm that a protocol exists to stop 'jamming'.
201104197	22/04/2011	S92	Brief uncommanded pitch followed by PSAS 2 caption (primary stabiliser augmentation system).	ECL carried out and caption cleared. Subsequent occurrence led to decoupling of the NAV and ALT functions, and using opposite mode select panel. PSAS 2 caption unable to clear. PSAS 2 deselected and a/c manually flown.
201105435	20/05/2011	S92	PAN declared due to engine malfunction when a/c was aboutto land on rig. One engine brought back to idle and a/c diverted. Squawk 7700 selected.	
201105550	24/05/2011	S92	Search and rescue mission carried out in an area close toVATDA low contamination boundary, but remaining outside the NOTAM area. Light deposits were seen to form on windshield and airframe.	CAA Closure: A/c subsequently cleaned and relevant engineering inspections carried out prior to return to service.
201105942	01/06/2011	S92	PAN declared and a/c returned due to engine malfunction.	

201106001	29/05/2011	S92	Nr2 hydraulic pump seized - gear teeth stripped but splined drive had not sheared. Nr2 input module chip detector contaminated with metal debris.	On a/c start up 'HYD 2 PUMP FAIL' caution light illuminated. A/c shut down and nr2 pump removed and inspected. Spline drive had not sheared but gear teeth at pump end were stripped inside of pump - pump and spline drive replaced. Rotors engaged ground run carried out and 'INPUT 2 CHIP' caution light illuminated. Nr2 input module chip detector checked and a high content of metal debris was evident on magnetic chip. Debris assessed as emanating from chewed up gear teeth on spline drive which had worked its way very quickly through into MGB input module.
201106825	20/06/2011	S92	Radalt bug failed to activate aural warning.	During SAR operations, a/c was operating at between 50 and 500ft. Both Radalts appeared to be functioning normally and the Radalt bug was set at 200ft. On each occasion thatthe a/c descended through 200ft no aural warning was heard. Reporter remarks that due to the large number of aural warnings on the a/c type, (in the SAR role particularly), pilots have remarked that they are becoming immune to them. In this case both pilots failed to notice that there were no aural warnings for some time. Additionally, the reporter feels that the 'Altitude, Altitude' warning is unsuitable since the Radalt is indicating height and not altitude. It is also similar in tone and sound to the 'Minimum, Minimum' warning. A more appropriate warning would be the instructional 'Check Height' as heard on another a/c type.
201106977	22/06/2011	S92	PAN declared due to autopilot malfunction.	Autopilot reset attempted but failed. Return to the departure airport initiated with both autopilots switched off iaw procedures.
201108097	26/06/2011	S92	Main rotor servo leaking on power up.	During a post maintenance hydraulic system test, LH main servo began to leak heavily from the gland seal. A/c was on the ground pump at the time. Servo replaced.
201108101	03/06/2011	S92	Main gearbox RH foot found to be cracked.	During NDT inspection of the MGB feet, the forward web ofthe right foot found cracked. MGB replaced. Investigationbeing progressed under 200909588 and 200909714.
201108494	23/07/2011	S92	During inspection, crack found on main gearbox assembly RH mounting foot.	Investigation being progressed under 200909588.
201108914	29/07/2011	S92	Fuel probes cracking in top mounts.	Fuel probes in tanks appear to have a cracking problem inthe nylon/plastic top bracket. During inspection, one probe came off by light touch by hand. Fuel probe replaced. Several other probes in a fleet of three have multiple cracks in top mount. Inspection programme (50hrs) has been established by manufacturer. CAA Closure: The manufacturer'sinspection criteria has been implemented into the operator's S92 maintenance programme.
201109368	10/08/2011	S92	MGB OIL PRES' caution at 3000ft during cruise. Emergencychecklist consulted. PAN declared. A/c returned.	No significant MGB pressure drop was observed although pressure varied between 53 - 57psi.

201109585	15/08/2011	S92	Handheld fire extinguisher damaged.	During the process of replacing the pilot collective griphandle, the release mechanism or handle on the fire extinguisher became stuck in the pocket of the engineer when exiting cockpit. It fell to the floor and the handle broke off.
201109587	14/08/2011	S92	Main rotor damper found to be leaking from the pressure relief valve.	
201110142	29/08/2011	S92	Tail gearbox chip caution illuminated.	TGB chip caution illuminated along with Master Caution. ECL consulted and the a/c returned to base. Subsequent investigations found the TGB chip detector electrical plug back to be corroded and impregnated with oil. Plug disassembled, cleaned, reassembled and sealed. Ground runs carried out with no further defects found.
201110178	25/08/2011	S92	Rejected take-off due to large bird standing in the middle of the runway.	
201112116	29/09/2011	S92	S92 issued with an incorrect departure instruction. Departures alerted by Radar. S92 descended back to intended climb restriction of 2000ft.	S92 had been given a coordinated climb restriction of 2000ft against a preceding departure cleared to 3000ft. Departures controller subsequently cleared the S92 to 3000ft inerror. S92 pilot reported prior to take-off that he was visual with preceding traffic. After Radar alerted departures of the error, the S92 initially reported visual but then stated losing contact with the traffic ahead. S92 was then descended to 2000ft.
201112491	10/10/2011	S92	PAN declared due to a fire warning nr2 engine. A/c landedsafely.	Crew assumed a safe single engine and carried out the fire drill iaw FRC's. Warning briefly extinguished then illuminated again. Crew considered the warning to be spurious and elected to continue to base. During flight, the fire warning illuminated several more times.
201112937	07/10/2011	S92	RH pilot seat fore/aft adjustment handle jammed.	Investigations proved to be difficult since the seat could not be removed from the cockpit due to the fact that it needed to move forward to be released. A strong force was applied to the release cable itself in the LH side of the seat which released it and it was found that books on the RH side of the seat had obstructed movement aft, leaving it locked one adjustment hole offset and in an offset position. It was then impossible to release/adjust by use of adjustment handle. Books position is common practice at the operator. The reporter suggests that loose books are not put near moving cockpit parts, i.e. seats, controls or operating handles/switches.
201113918	17/10/2011	S92	Main rotor servo leakage during ground run.	Leak found from gland seal of the LH servo.
201114414	21/11/2011	S92	Poor ATC coordination resulted in a level change for an S92A not being passed to Scatsta. Avoiding action and traffic info given by Scatsta ATC.	Procedural separation lost.
201114824	02/12/2011	S92	Level bust.	Radar called to confirm level that had been coordinated as a/c called 3000ft but showing at 1700ft. Pilot admitted error and that he was now climbing to 3000ft.
201115161	10/12/2011	S92	In cruise fire warning came on remaining for 2secs and then disappeared. Warning then appeared a further five times.A/c returned.	Crew decided it was spurious. Following return, flame detectors inspected with no faults apparent. Fault suspected with outboard loom, replaced with a serviceable item. Ground runs carried out and a/c returned to service.
201115678	22/12/2011	S92	PAN declared due to strong smell of smoke in cockpit. A/creturned. RFFS deployed.	Investigation revealed a cockpit vent fan.

201115705	21/12/2011	S92	Engine pop during landing phase offshore.	During the landing phase the a/c was affected by turbulence from the area of the platforms turbine exhausts. A small bang was heard from the engine area on the a/c. It was also noticed that NR was at 107% and recovered quickly to 105% The weather report from the platform stated that the wind was 210/30, well out of the turbulent sector. After landing, it was noticed that the actual wind was more 175/30. Platform have been asked to have their wind recording equipment re-calibrated. Investigations found that nr2 engine had popped. No damage apparent during borescope inspection..
201115706	21/12/2011	S92	Engine pop during take-off.	Approach to platform wind reported as 210/29. On final approach, wind estimated by flight crew to be 180. Landing accomplished. Whilst on deck, wind appeared to be back to 170 or 175. Lift to the hover in moderate turbulence, pop on nr1 engine during rotation, rotor increase to 107% momentarily. EPAC carried out and proved satisfactory. At the end of the day, a borescope inspection was carried out on nr1 engine with no defects apparent. A/c assessed as serviceable.
201115844	28/12/2011	S92	Severe vibration during climb.	During climb, severe vibration experienced, to such an extent that neither pilot could focus on the flight instruments. No cautions or warnings illuminated. Damper failure appeared a reasonable diagnosis. A precautionary landing carried out, but ditching was not ruled out. Autopilot decoupled, RH turn and descent initiated, after approx 10secs and passing through downwind vibration ceased. Engineering advice sought but fault could not be reproduced. After further consultation, a/c returned without further incident but as a precaution autopilot upper mode not used. Upon return to base, further investigations carried out but no fault found. Due to the short period of vibration and the vibration free return leg of the flight, it is felt unlikely the vibration was due to mechanical wear or failure. It isthought that the vibration was possibly caused by selecting 'Direct Gyro' to 'Magnetic Gyro' with the autopilot engaged with 3Q. There was a 30deg heading difference betweenDG and MG. The vibration could be due to the autopilot trying to accommodate the sudden heading change, however, itis thought that would only have resulted in a gentle rolland change of heading. Concern raised that the simple procedure of switching from DG to MG could have resulted in the ditching of the a/c.□ CAA Closure: Selection of autopilot upper modes when the compasses are not synchronised caninduce a vibration, as the autopilot attempts to compensate. Through the Chief Type Training Captain, the operator has emphasised to its crews of the need to synchronise thecompasses after departing an offshore location prior to engaging any of the upper modes. Having alerted the crews to the potential problem, they will continue to monitor forany further occurrences.
201115990	19/12/2011	S92	Cracked main gearbox casing.	Small quantity of oil observed to be leaking from the main gearbox casing around a blanked off plug. Noted following unrelated start up problem. Investigation being progressed under 200909588.

201200361	11/01/2012	S92	Overtorque whilst selecting for large QNH change.	Erroneous selection of 'Airspeed hold' caused the overtorque.
201200781	23/01/2012	S92	Bifilar bolt failure.	On landing a momentary wobble was felt and an object seenseparate from the rotor disc. MRH bifilar bolt and washerwas collected from the scene. On inspection the MRH was found to have a bolt missing from one of the bifilar weights. A/c also sustained damage to 3 main rotor blades, one of which will have to be replaced. The sheared bolt was found to be titanium. Operator's fleet was changed to steel bolts. The particular bifilar had been replaced as an assembly and the titanium bolts unknowingly re-introduced. Restof the fleet inspected with no further titanium bolts being found.
201201007	30/01/2012	EC225	Loss of separation between an EC225 and a S92 on HMRs receiving a Deconfliction Service from Aberdeen. ATC distraction involved. Traffic info given.	The sector traffic levels were light with 3 a/c on frequency and some icing conditions affecting helicopters above 2000ft (Notam issued). The S92 (I/B) departed from Fortiesfield (HMR080) climbing to 1000ft and requested 2000ft, which was approved by REBROS controller who annotated the strip, also reflected on the pending strip in the HELS controllers panel. The EC225 (O/B) was routeing direct to the Armada platform at 3000ft and requested descent to 2000ft (crossing the HMR085) which was approved by HELS controller. Both HELS and REBROS dynamic strip bay show the S92 at 2000ft and the EC225 descending to 2000ft. The S92 was transferred to HELS and when the two a/c were 12.2nm apart. Ahandover of both positions occurred and the oncoming REBROS controller alerted the HELS controller to the conflict.The HELS controller instructed the EC225 to turn left 20deg and the pilot offered to start the descent to 1000ft which was approved. The controller instructed the S92 to turn left 15deg but there is no initial response and after the second call the S92 pilot acknowledged. The term avoiding action was not used. The root cause of this incident wasthat the HELS controller approved the EC225 request for descent to the non standard 2000ft without recognising the potential conflict with the S92 opposite direction. A number of factors were considered to be contributory. The REBROS controller was busy when the HELS controller tried to coordinate and HELS had considered that there was no traffic to affect. The HELS controller missed the visual clues.CAA Closure: A number of unit recommendations have been made to address the issues and learning points raised by this incident.

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201201044	29/01/2012	S92	Nr2 engine surged, accompanied by a loud pop, just after take-off.	Crew levelled off and EPAC test conducted. Flight continued with no further incident. Nr2 engine inspected, EPAC checked and no fault found.
201201237	03/02/2012	S92	Altimeter subscale runaway.	While setting the Glasgow QNH (1032) when cleared to descend from FL75, both pilots experienced altimeter subscale 'runaway', whereby the subscale setting jumped ten or moreHPa when the display control panel selection knob was turned one click. As the a/c was coupled in VS, no altitude change occurred. Investigation being progressed under 201106825.
201201374	09/02/2012	S92	In flight, main gear box oil warning light appeared, withfluctuating oil pressure. QRH actioned. PAN declared and the a/c returned for an uneventful landing.	Low oil pressure switch replaced.
201201779	20/02/2012	S92	UK AIRPROX 2012/019 - S92A and a military a/c at 2000ft 4.1nm North Stornoway. Traffic info given. Class G airspace.	Information indicates that this AIRPROX was a non-sighting by the military jet crew and effectively a non-sighting by the S92 crew. CAA Closure: No further CAA action. ThisAIRPROX has been subject to a separate review by the United Kingdom AIRPROX Board (UKAB).

201201779	20/02/2012	Military	UK AIRPROX 2012/019 - S92A and a military a/c at 2000ft 4.1nm North Stornoway. Traffic info given. Class G airspace.	Information indicates that this AIRPROX was a non-sighting by the military jet crew and effectively a non-sighting by the S92 crew. CAA Closure: No further CAA action. ThisAIRPROX has been subject to a separate review by the United Kingdom AIRPROX Board (UKAB).
201201797	20/02/2012	S92	On arrival it was discovered that the RH gravity fuel access door missing. Only the hinge, without the pin, remained.	It appears that the pin may have worked its way free and there was no evidence of panel contacting any other part of a/c when it separated.
201202172	01/03/2012	S92	A/c inbound at 1000ft when spurious nr2 engine fire warning light and aural warning occurred.	Fire warning light and aural warning lasted for no more than 1sec. Cannot confirm if the 'Fire Push' button for nr2engine fire illuminated. Immediate ECL items completed. No signs of fire confirmed. A/c continued towards landing.
201202630	13/03/2012	S92	Engine nr2 fire warning briefly illuminated.	Subsequent engineering inspection found no defects. However, due to known history, the outboard flame detector was replaced.
201202777	15/03/2012	S92	CPI beacon deployed when battery selected on during pre-start checks. Blue 'Deployed' light illuminated and aural warning activated.	ATC and engineering informed. Beacon replaced.
201202811	19/03/2012	S92	A/c returned following fire warning on nr2 engine.	Intermittent fire warning occurred with no signs of fire.A/c returned and engine shut down upon landing. During subsequent investigation, no defects found but nr2 engine outboard flame detector replaced as a precaution.
201202839	19/03/2012	S92	LH rad alt malfunctioned causing multiple spurious warnings due to its information feed to the EGPWS.	Altitude, Altitude' and 'Hover Altitude' warnings enunciated. The LH rad alt was displaying 26ft. The C/B was pulled from the LH rad alt to enable the RH rad alt to take over, but due to the EGPWS taking its readings from the LH unit, various 'Caution Terrain' and 'Warning Terrain' alerts were generated throughout the descent. After becoming visual with the surface the a/c landed safely, during which the LH rad alt reset itself to read correctly once the a/chad descended through 26ft. CAA Closure: The defect could not be repeated during extensive fault finding by engineering staff. Flight crews advised to monitor and report further.
201203224	28/03/2012	S92	Autopilot failure during cruise.	Cruise checks were actioned with a/c level at 2000ft. Switching compasses from DG to Slave produced a heading mis-compare as the P1 HSI swung through approx 15deg. This was followed by AFCS degrade and complete loss of autopilot function including SAS. Two autopilot resets were required to restore autopilot function.

201203639	06/04/2012	S92	Spurious nr2 engine fire warning.	Nr2 engine fire warning sounded twice then stopped. Instruments closely monitored. Shortly afterwards the Rotor IceProtection System (RIPS) controller 1 failed. Crew followed emergency operating procedures. Due to the history of spurious nr2 engine fire warnings, both the outboard flame detector and harness have been replaced and suspect parts returned to manufacturer for assessment. Further to this, a sealing kit for existing harnesses and components will be applied to the fleet and results monitored.
201203675	06/04/2012	S92	Runaway QNH.	ATC advised a/c of a QNH change from 1011 to 1010. However, when QNH was selected with one click anticlockwise, it reduced immediately to 987 which was followed by a 'Check Altitude' warning. The setting was changed again and once more jumped to an unwanted value. Thereafter the QNH was restored on both the PFD screens.
201204651	30/04/2012	S92	A/c returned due to nr2 inlet anti-ice failure.	Anti-ice fail caption illuminated and ECL drills completed. Caption failed to clear. Unable to vacate icing conditions due to cloud base and outside air temperature so decision was made to return. A/c landed safely.
201204829	04/05/2012	S92	During cruise at 3000ft nr2 engine fire warning light illuminated. Speed reduced, fire warning ceased. All indications normal with no positive signs of fire. A/c returned for precautionary landing.	On investigation a gas leak was identified next to the outboard detector. Duct clamp not orientated correctly allowing gas to escape beside the outboard flame detector. Reporter concerned that this was incorrectly initially identified as a spurious warning due to the numbers of spurious fire warnings on this a/c type.
201205193	11/05/2012	S92	Shortly after take-off an AFCS degrade caption showed, a reset was tried but the fault returned and was accompaniedby an autopilot 1 fail.	A full reboot was carried out with initial success but the faults soon returned. On checking the health page it wasfound that cyclic trim 1 and 2 were inoperative, which was due to the cyclic trim button not working and the control stick permanently in trim release mode. A return was initiated in VMC.
201205749	26/05/2012	S92	A/c on search and rescue mission. Nr2 engine chip cautionilluminated. Emergency checklist actions carried out, PANdeclared and a/c diverted.	
201206069	01/06/2012	S92	Main rotor head damper piston past retirement life. Item removed and replaced on return of a/c from service.	

201206122	04/06/2012	S92	Inbound dangerous goods shipment leaking. Additionally, during paperwork and consignment checks a number of errors were found with the shipment.	UN1202 diesel fuel found leaking from the inner packagingplastic bottle.
201207175	27/06/2012	S92	Loss of communications following navigation and radio failure, leading to intentional localiser exceedance.	EOPs actioned and the PM used the PFs navigation and radio display. Frequencies were cross-checked twice but it seemed that the RTU reselected two random frequencies causingthe flight crew to lose communications with ATC temporarily. The ATC director frequency was reselected and the crewelected to fly through the localiser at the same time as re-establishing communications. On arrival engineers replaced the RTU and ATC were briefed about what had occurred.
201208393	18/07/2012	S92	A/c initially had a heading miscompare, this was followedby a double autopilot failure in IMC conditions. Emergency checklists consulted, unable to regain autopilot function.	Further diagnosis attempted and nr2 compass manually slewed to nr1 compass and managed to regain nr2 autopilot. After 5-10mins, failed again. ILS completed manually in SAS mode and a/c landed without further incident.
201208558	25/07/2012	S92	Burning smell from brand new APU.	Crew had difficulty starting the APU prior to the flight,and the electrical burning smell became apparent en-route. The odour dissipated when the unit was switched off.
201208934	01/08/2012	S92	A/c landed and refuelled at a closed airport.	A NOTAM had been issued due to work in progress which additionally suspended the out of hours permits. The out of hours call out system was not used and there was no RFFS service present.
201209712	13/08/2012	S92	Nr2 engine exhaust tailpipe complete with cover detached in flight.	One piece of the retaining flange was found under each ofthe attachment nuts. The operator is reviewing the inspection requirements in conjunction with the OEM.
201209932	20/08/2012	S92	PAN declared due to double autopilot fail, reduced stability and speed. A/c returned.	A/c initially had a heading miscompare, this was followedby a double autopilot failure in IMC conditions. As a precaution flight was continued VMC. On finals the RH Attitude Indicator showed opposite roll to LH instrument and standby. This was followed almost immediately by a further double autopilot failure which could not be recovered and spinning HSI on RH side. Attitude Heading Reference System (AHRS) rev 1 was selected and a/c returned.

201210364	28/08/2012	S92	Spurious fire warnings on nr2 engine during turbulent conditions.	On lifting off, the a/c experienced buffeting from the turbulence and the nr2 engine fire warnings illuminated intermittently. ECL actioned and warnings ceased. This happened once more during the flight. Take-off was continued as no signs of fire were confirmed. A/c landed safely.
201210713	06/09/2012	S92	PAN declared with high gearbox temperature indications. PF then advised the warning was probably spurious.	Main gearbox 'Oil Hot' caution illuminated. Reduced power and emergency checklist consulted.
201210794	05/09/2012	S92	Internal audit found that six float bottles had overflown the 5 year hydrostatic test.	Fleet check being undertaken and an Information Notice is being sent to all Technical Records departments within the organisation.
201210972	10/09/2012	S92	During landing on oil rig, the tail rotor struck a whip aerial. Several tail rotor blades required replacement.	CAA Closure: The investigation found the following; In accordance with the HLL, an ARA should have been conducted, which was not done. The 210° arc was reduced to 198°, due to the “A” frame of a crane to Port, and the antenna array on the Pilot House roof. This non-compliance was promulgated in documentation available to the pilots. The deck marking location had been changed approximately one year previously, from off-centre to centre. This information was not passed to the helicopter operators, and was therefore unavailable to pilots. One 8m whip aerial, one lower aerial and two TV type aerials infringed the base of the 198° arc, whilst the top of the whip aerial significantly infringed the arc due to flexing. The handling and non-handling pilots perceived that they were clear of the aerials, but this perception was incorrect, since they came into contact with the aerial. The top 400mm, was sheared off the whip aerial. The CVR was not isolated from power which meant that the relevant incident information was overwritten, and therefore unavailable. Deck markings are inconsistent with the latest guidelines in ICAO CAP 437. The training department had noticed a trend of pilots prioritising OEI (one engine inop) profiles on approach rather than obstacle avoidance. This was corrected and Flight Crew Training Post Holder published some Training Standards Notices to all TREs. The helideck markings had been repainted due to the original off centre circle being repositioned to centre helideck in accordance with CAP 437. In this particular case it meant that a landing within the aiming circle would reduce the distance between the tail and any obstruction to the aircraft rear. The whip aerial has been moved and Helideck Certification Agency (who approved the previous position) have refined their acceptance procedures. The rig plate has been updated, but there are still some question marks over the whole HCA process for the production of these plates. They will be taking on a dedicated graphics designer to produce them in future.

201211283	18/09/2012	S92	A/c returned due to four double auto pilot failures in various configurations.	Initially, a pitch mis-compare warning and heading mis-compare on first taxi out indicated that the Attitude Heading Reference System (AHRS) was faulty. These failures caused both autopilots to fail so a/c returned for engineer's inspection. MEL consulted and decision was made that the flight could take place with one AHRS inoperative as long as conditions were VFR, which they were. Once airborne, a further double AP failure occurred, systems reset and again it happened. ECLs actioned and the same result occurred twice more. A/c returned to base. CAA Closure: On arrival the a/c was inspected iaw the Maintenance Manual and the fault was traced to the compass controller which was subsequently replaced.
201211443	19/09/2012	S92	Dangerous goods consignment of Lithium Batteries (UN3841) and weights not included on manifest.	Further investigation has revealed that the goods were shipped in accordance with IATA Regulations, however it appears that no manifest was provided for the cargo by the charterer.
201211769	20/09/2012	S92	Incomplete assembly following repair, resulting in MGB oil leak from pressure transmitter.	Oil leak discovered during routine daily inspection. MGB oil pressure transducer had a history of leaks with various replacements of 'O' rings and had just had the Rosan insert replaced. With all this in mind, the decision was made to have the MGB replaced. Whilst swapping the oil pressure transducer during the MGB replacement, it was discovered that there was no 'O' ring fitted. CAA Closure: The investigation highlighted communication and training issues. The operator has taken three action items from this incident; 1 Introduction of a signature block on the workcards for non-certifying mechanics; 2 Training review for Check Supervisors in Base maintenance; 3 Through circulars and continuation training highlight the importance of communication between supervisors, individuals and shifts, using this as a case example.
201212442	10/10/2012	S92	GPS jamming of a/c systems.	Shortly after take-off, the 'AHRS-FMS' mis-compare advisory message was posted along with associated cautions and loss of EGPWS with audio warning. The GPS feed and map position were no longer reliable. ECL actioned and systems returned after approx 8mins.
201212974	23/10/2012	S92	Double auto pilot failure.	Just after a go-around as the a/c turned to intercept the inbound course, the angle of bank increased beyond normal and both auto pilots simultaneously failed. Attitude was recovered and the a/c was climbed to a level where resets could be performed iaw checklists. A/c landed safely. Investigation under 201211283.

201213183	28/10/2012	S92	During scheduled maintenance, main rotor gearbox lubrication pump attachment lug found to be sheared. Recurring fault.	CAA Closure: Investigations found one of the two attachment lugs for the RH pump sheared. Pump replaced and ground run function and leak checks carried out. This is a known issue and has been discussed during the Operator/OEM Technical Liaison meetings. The pumps are currently being removed for a 250hr replacement life of the spline shaft as per Chapter 5 of the Sikorsky Airworthiness Limitations document. Cracking of the lube pump lugs has been a problem ever since the operator started removing the pumps on a regular basis to inspect the drives. All cracks can be attributed to incorrect removal / installation procedures with mechanics not following the OEM procedure gradually cranking out or in a quarter turn on each screw / nut during removal or installation. The operator has implemented a section within engineering continuation training on this issue and how to remove the pumps iaw OEM recommendations as a reminder. This procedure also forms part of the Operator's Part 147 type training course. The OEM has improved the retaining nut for the pump, which now has a wider contact area to reduce possibility of lug cracking, and also amended the AMM to highlight the possibility of pump lug cracking if the procedures for removal are not followed. The lube pump vessel splines are presently on a 250hr scheduled replacement but at the recent MRSG (maintenance steering group) all major operators wanted to see this period extended to at least 375hrs, with 750hrs as a target. The operator is not seeing any unusual wear at 250hrs but a very conservative approach is being adopted due to the critical nature of the oil system in the S92 MGB. This should additionally reduce instances of this type of failure. These actions have meant that this issue is no longer on the operators list of technical issues outstanding with Sikorsky, but will continue to be monitored.
201214295	24/11/2012	340	SF340 received a TCAS TA whilst on final approach at approx 2.5nm. Go-around initiated. TCAS RA 'climb' then 'adjust v/s' received approx 2secs later. Second approach uneventful.	Traffic info given, however, crew state that this was difficult to hear and had been issued whilst final landing checks were being carried out. Landing gear retraction speed of 150kts exceeded during the go-around. Helicopters orbiting VFR at the end of the downwind leg is a common scenario at Aberdeen. The TCAS in the SF340 is inhibited below 1000ft, it will give a TA but not an RA. As the SF340 climbed above 1000ft, the TCAS warning changed to an RA. CAA Closure: The issue of TCAS generating alerts against VFR circuit traffic has been raised at the Aberdeen Flight Operation and Safety Committee to enhance awareness.
201214295	24/11/2012	S92	SF340 received a TCAS TA whilst on final approach at approx 2.5nm. Go-around initiated. TCAS RA 'climb' then 'adjust v/s' received approx 2secs later. Second approach uneventful.	Traffic info given, however, crew state that this was difficult to hear and had been issued whilst final landing checks were being carried out. Landing gear retraction speed of 150kts exceeded during the go-around. Helicopters orbiting VFR at the end of the downwind leg is a common scenario at Aberdeen. The TCAS in the SF340 is inhibited below 1000ft, it will give a TA but not an RA. As the SF340 climbed above 1000ft, the TCAS warning changed to an RA. CAA Closure: The issue of TCAS generating alerts against VFR circuit traffic has been raised at the Aberdeen Flight Operation and Safety Committee to enhance awareness.

201214491	28/11/2012	S92	Fumes (electrical burning smell) in cockpit.	A/c on airtest to check out faulty engine anti-ice system. Shortly after departure, when the engine anti-ice inlets were selected on, 'Anti-ice 1 and 2 fail' captions illuminated accompanied by an electrical burning smell. EOPs carried out and the a/c returned. The fumes dissipated but returned on short finals so emergency services requested to attend. Upon inspection of the engine inlet anti-ice assembly, an electrical cable was found to be chafed and had short-circuited to the inlet. The current limiter had blown and various C/Bs tripped out. Cable and connector to be replaced.
201214702	04/12/2012	S92	Lightning strike during cruise. No abnormal indications and flight continued.	Subsequent engineering investigation revealed evidence of strike on main and tail rotor blades. Tech Log entry made and further inspections being carried out.
201214784	07/12/2012	S92	Overfly of scheduled check.	Check was due at 2142.44hrs but went overdue at 2144.59hrs over the weekend as an out-of-date due list had been sent out in error on the Friday.
201214944	04/12/2012	S92	Damaged bus bar panel.	During investigation into an ongoing AVC electronic fault, a screw within the circuit breaker/bus bar cable connection was found to have chafed into the cables and a bus bar screw with associated arcing. Damaged parts replaced. CAA Closure: The underlying cause of this fault was a gap in the quality control at the factory as the operator had a string of events with newly delivered aircraft. After all the modifications for North Sea delivery configuration there was not a final close-out inspection of the disturbed C/B panels after multiple interference. This has been rectified at the factory and the faults post delivery have ceased.
201214967	09/12/2012	S92	Smoke in flight deck.	Smoke was seen emanating from the top of the avionics panel. ECL action completed, aircraft shut down and evacuated. Emergency services attended the scene. No hot spots confirmed by fire services and engineering assistance sought. CAA Closure: Fault traced to LH rack cooling fan failure.
201215609	28/12/2012	S92	Crack found on aft transmission deck during daily inspection.	The crack was 9.75in from the main frame and was approx 3.75in long. AOG awaiting instructions from manufacturer. CAA Closure: The cause of the crack is due to a design issue of which the AMP has been updated to provide a more detailed inspection in the affected area during the 150hr inspection. A further check in this area has been added to the daily inspection. Fleet Support will monitor for any further instances.

201300231	10/01/2013	S92	Double autopilot failure and navigational display error.	On positioning for ILS approach, 'heading miscompare' displayed. Shortly afterwards both autopilots failed. Manual control was taken and reset procedure followed. Autopilots regained but the heading miscompare remained throughout the approach. Compass re-slave did not resolve the problem.
201300246	11/01/2013	S92	Runway incursion.	S92 cleared to land R/W24. Runway occupied by a vehicle, which had been previously cleared onto the runway for a runway inspection. Blocking strip not used. Error became apparent when vehicle reported runway vacated. S92 was at approx 2nm final and continued approach to land. Both a/c and vehicle on Tower frequency. CAA Closure: The runway incursion occurred when the controller did not utilise the runway blocking strip (iaw MATS Part 2) to indicate that the runway was blocked. The controller then failed to visually check the runway before incorrectly issuing a landing clearance to the S92. The vehicle driver's situational awareness was such that he expedited vacating the runway ahead of the helicopter arrival, but not before a landing clearance had been issued by the controller. Appropriate ATC remedial action taken, including a change of procedure notice to ensure that all staff are reminded of the requirement to remain vigilant and conduct a visual check before giving a clearance onto the runway.
201300624	20/01/2013	S92	Nr2 engine low oil pressure warning.	The pressure indication was then seen to drop into the 'yellow' range, stabilised at 24PSI. Engine set to idle and then shut down. Inspection found that 'B' sump scavenge tube connector at combustion chamber was loose. Connector re-torqued. Ground run and leak check carried out before a/c returned to service.
201300992	29/01/2013	S92	Multiple cautions during final approach: 'Anti-ice degrade, 'FADEC 1 Fault' and 'FADEC 1 No Dispatch. Go-around flown. 'FADEC Power Lim' followed by 'FADEC 2 Fault' illuminated. A/c returned.	Eng 1 anti-ice degrade' light extinguished. Nr1 engine running higher Ng with corresponding higher TGT, 950 at 70% Tq. Power reduced in cruise to 65% Tq 850 TGT. Nr2 engine normal. Checklist consulted and engineering advice sought on return. Nr1 and nr2 FADECs were replaced, no fault found. The suspected cause of the increase in Ng and TGT is a bleed of air from the anti-ice start and bleed valve (AISBV). Reporter suggests this could be due to a faulty AISBV or a command from a faulty FADEC. Nr1 FADEC and nr1 engine were replaced. A/c returned to service.
201301009	31/01/2013	S92	Birdstrike. Damage to radome.	One bird struck. Species believed to be a gull. Post bird strike inspection carried out and the nose radome was found damaged on the lower RH side of the locking mechanism. Bird remains found below this area in the landing light recess.

201301106	02/02/2013	S92	Winch cable became entangled during rescue and had to be severed.	The cable was seen to wind around a searchlight on top of the fishing vessel after winch man arrived on deck. Winch operator called for cable to be cut and the co-pilot operated hoist shear. CAA Closure: This occurrence happened during a night search and rescue operation to recover a person from a fishing vessel and might be considered a normal risk of SAR operations. The cable was cut as required during challenging performance conditions. Ongoing training minimises risk and a second winch is carried for this purpose.
201301196	04/02/2013	S92	A/c under investigation for nr2 engine fuel pressure caption and engine fluctuations.	Metallic particles found in fuel filter bowl. Suspect foreign object in nr2 engine fuel pump. Ferrous deposits found downstream from the pump. On manufacturers advice nr1 and nr2 fuel tanks opened and inspected for missing rivets. Nr1 tank had three missing and nr2 had 6 rivets missing. A/c currently awaiting repair scheme from manufacturer.
201301219	06/02/2013	S92	PAN declared following lightning strike and subsequent vibrations.	Immediately after the strike, air data to the PFDs was lost so manual control was taken to descend and reach VMC at 1500ft. The low and medium frequency vibrations increased. 'AVC FAIL', 'AFCS DEGRADE' and 'DE-ICE FAIL' cautions illuminated. The a/c landed safely with emergency services in attendance.
201301673	18/02/2013	S92	Damaged LH input module.	During investigation of high vibrations on the high speed shaft (HSS), the engine was removed and it was noted that there was swarf around the locking nut on the input coupling. The coupling within the input module was found to be damaged despite the unit being a serviceable item delivered recently.
201302066	05/02/2013	S92	UK AIRPROX 2013/010 - S92 and a military aircraft, 110nm ESE Aberdeen.	This AIRPROX has been subject to a separate review by the United Kingdom AIRPROX Board (UKAB). AIRPROX Board (UKAB) information indicates that this AIRPROX was due to the S92 crew becoming concerned regarding the proximity of the military helicopter. CAA Closure: No further CAA action at this time.
201302336	06/03/2013	S92	Loss of separation between a Scatsta inbound S92 and an outbound S92. Appropriate ATC action taken.	The controller realised too late that the inbound was descending to an altitude of 2000ft on the Marlin QNH of 1008mb and the outbound had been coordinated at altitude 3000ft on the Scatsta QNH of 1014mb. Controller immediately instructed the inbound to select the Scatsta QNH, when the a/c were approximately 2nm apart.

201302685	12/03/2013	S92	Chip system fault indication.	During refuelling, the chip system fault indicator illuminated briefly. It happened again twice more so a/c was shut down and engineers informed. Ground runs and system reset carried out and the system became operational so a/c was cleared to return to base. During the return flight, the same warning intermittently persisted. Checklists actioned and an expeditious landing was made at destination.
201302715	15/03/2013	S92	PAN declared and a/c diverted due to nr1 engine chip warning. Local standby called.	
201303687	05/04/2013	S92	RH engine intake wiring loom found damaged during scheduled 1500hr inspection.	Two 8 gauge cables found to have rubbed on the drain valve from the main gearbox casing. Loom replaced.
201304455	22/04/2013	S92	During deck inspection oil leak discovered from the nr2 engine input to the main gearbox.	Ground run carried out, leak within acceptable limits in accordance with MM. Seal replaced back at base. It was also noticed that one of the blade tie down straps was missing leading to an inability to secure one of the rotor blades. This did not result any further issues.
201305471	14/05/2013	S92	Collective trim runaway down.	On departure from platform, at 300ft when selecting go-around aircraft suffered a collective trim runaway down. Aircraft flown manually and EOPs actioned. Aircraft continued to destination.
201305547	15/05/2013	S92	Fuel feed check valve failed resulting in hung start on engine shutdown.	Failure due to an 'O' ring which became extruded from the valve body. Fuel leak results into a bay with many ignition sources and failure in flight during single engine operations could cause failure of other engine. CAA Closure: Over-torquing of fuel feed check valve during installation, leading to premature failure of the sealing o-ring. Operator has highlighted to staff this issue and the manufacturer is tracking this type of failure through Internal reporting. The manufacturer has amended the valve installation instructions to highlight the need to ensure correct torque applied and the risk of over-torquing. A torque strip is also required to be applied at installation. The operator has experienced no further failures of this valve since the actions detailed above were implemented. A modified valve is being considered by the manufacturer.

201305634	17/05/2013	S92	Compressor stall on final approach.	At approx 30ft above platform, four or five 'pop' surges (compressor stall) were heard on one engine. Fluctuating torque observed on the other engine. An Engine Power Assurance Check (EPAC) was carried out prior to return to base. On deck the OAT was observed to be 9deg above ambient. The turbine exhausts situated below helideck level were operating on both east and west side of the platform but no exhaust plume was obvious on approach. The wind was outside of the HLL published sector and a turbulence report has been filed. Operator contacted platform to ask if they were doing anything unusual at the time.
201305878	22/05/2013	S92	Part of exhaust tail pipe became detached and fell from a/c.	After departure, a radio call was made to advise the crew that a 12in cylindrical object had been seen falling from the a/c into the sea. No abnormal indications in the cockpit and the flight continued to the next rig. The Captain carried out a walk round inspection and found nothing unusual. A detailed inspection by engineers back at base found that the nr1 engine exhaust pipe was missing the circular can in the exhaust. Tail pipe replaced with a serviceable item. CAA Closure: The aircraft manufacturer have not identified any other issues; they are still reviewing the part but not committing to change the inspection interval. The operator may reduce the inspection interval in due course. The manufacturers Technical Rep present advised that there have been no reports worldwide of this issue. There is already a maintenance inspection in place for this and seems to be at the correct frequency for the defect to be caught, they agree it should not be happening and they are currently reviewing a potential mod and / or modifying the interval of the inspection. It was agreed that this can be managed through our normal technical meetings in place with the manufacturer. Fleet checks performed with some evidence of other items displaying this damage. Subject parts replaced and no further occurrences reported. Consideration of AMP inspection frequency change to be discussed at AMP review meeting.
201305970	25/05/2013	S92	During a/c turnaround inspection between flights, both engine fire extinguisher bottles were found discharged.	The main squibs on both bottles were found fired. Defect under investigation. Reporter states that this is the second occurrence within 24hrs, the first being discovered after flight servicing. CAA Closure: Inertia switch PN: A13018-10 SN 105493 suspected faulty and replaced.
201306403	04/06/2013	S92	PAN declared due to engine chip warning on nr1 engine. Aircraft diverted for a safe landing.	The aircraft was routing to refuel before continuing to the oil rig in East Shetland Basin. The passengers disembarked the aircraft. Fire crews were present.

201306546	06/06/2013	S92	S92 landed long mssing their allocated runway vacating point.	Aberdeen inbound S92 was cleared to land on the Northern half of R/W16 and vacate through M5 or M7 before the R/W23 intersection, which was correctly read back, whilst another S92 was lining up on the Southern half of R/W16. However, the inbound S92 subsequently overshot both M7 and M5 and came to a hover just past R/W23 intersection. ADC instructed the S92 to perform a 180 and vacate through D2. ADC then cleared the Aberdeen outbound S92 for take-off. Inbound S92 captain acknowledged the mistake and explained they had been performing a line training flight with a trainee F/O flying the ILS and had deviated above the glideslope, the captain had taken control of the S92 but had been unable to recover the situation in time to vacate at M5 or M7.
201307173	19/06/2013	S92	TWR issued a taxi clearance to an S92. As the S92 released brakes, a fuel bowser subsequently passed in very close proximity from behind the S92 and pulled in front of the helicopter to drive along a road next to ATC. TWR controller informed.	
201307643	28/06/2013	S92	S92 descended below their cleared altitude without ATC clearance.	S92 had requested descent from 3000ft and been advised to contact the next sector due to traffic. S92 subsequently commenced descent before making any contact. Information indicates there was a misunderstanding between the S92 flight crew, which led to the crew mistakenly believing they had been cleared to descend before being transferred to the next sector.
201309085	22/07/2013		S92, under a Procedural Service in Class G airspace, received/complied with TCAS RA and initiated a descent against a Beech aircraft, which had descended without advising ATC.	ATC informed.
201309377	24/07/2013	S92	On departure, an abrupt manoeuvre was experienced due to a problem with the cyclic trim.	EOPs carried out and aircraft returned. CAA Closure: The defect could not be reproduced and the system was tested with no faults found.
201310166	07/08/2013	S92	Birdstrike to one main rotor blade. Flight crew were unaware strike had occurred.	Post flight engineering inspection revealed a birdstrike had occurred.
201310395	15/08/2013	S92	Local standby issued due to undercarriage problem on take-off.	ATC observed the undercarriage to retract. Whilst the aircraft maintained the hover, the flight crew asked whether the landing gear was down as the display indicated three green lights. A local standby was initiated and the pilot recycled the landing gear which appeared to resolve the problem. The aircraft air-taxied to the engineers where they placed a pin in the landing gear.

201310650	22/08/2013	S92	PAN declared due to ACARS failure. Aircraft diverted.	LVPs were in force around Aberdeen. Due to the autopilot failure the aircraft was attempted to be kept VFR by the controller.
201311159	31/08/2013	S92	Corroded part found in oil pump assembly.	Whilst removing and installing the RH oil pump for spline inspection, the inboard attachment lug was found to be detached from the main pump body due to corrosion.
201311160	28/08/2013	S92	Component overhaul life overrun.	Four components had missed the maintenance requirements due to a suspected administration error. Upon realisation that these items were overdue the bases were contacted and instructed to comply with the requirements before returning the aircraft to service. The errors were also corrected and the due lists now reflect these requirements.
201311469	09/09/2013	S92	Departing S92, cleared to 2000ft, was observed climbing to 2900ft. Standard separation maintained.	ATC queried the S92 flight crew, who apologised and descended back to 2000ft. S92 flight crew explained they had deviated from their normal climb procedure and had planned to engage ALT to level out at 2000ft but had become distracted, resulting in the S92 exceeding the ATC climb clearance of 2000ft. CAA Closure: Incident attributed to lack of monitoring by crew. Flight Safety Instruction (FSI) on automation issued.
201311722	14/09/2013	S92	Gearbox chip warning. PAN declared, aircraft returned.	Master caution illuminated together with 'Input Chip Number 1' warning. Emergency checklist consulted and actioned. PAN declared and aircraft returned to base with no further incident. Taxied to stand with fire service in attendance. Input module assembly replaced.
201311880	16/09/2013	EC135	UK AIRPROX 2013/134 - S92 in receipt of a Procedural Service and an EC135, 8nm Northeast of Scatsta in Class G airspace. Traffic info given. ATC informed.	CAA Closure: The controller passed appropriate traffic info to the S92 on a Procedural Service and also to the EC135 on a Basic Service. The two aircraft were operating in a Class G environment and were ultimately responsible for their own collision avoidance. The controller was not required to provide any Deconfliction minima between the two aircraft. The S92 pilot sighted the EC135 and took avoiding action. This AIRPROX has been subject to a separate review by the United Kingdom AIRPROX Board (UKAB). AIRPROX Board (UKAB) information indicates that this AIRPROX was due to a late sighting by the S92 pilot and a non-sighting by the EC135 pilot.

201312134	23/09/2013	JETSTREAM4100	UK AIRPROX 2013/141 - Conflict between an outbound S92, still on R/W16 in a hover and a JS41 in descent to R/W16. Traffic info given.	Investigations have revealed that an S92 helicopter, incorrectly took an instruction to line up on R/W16 which was issued by ADC to another helicopter, at a different holding point. The read-back from both helicopters was simultaneous, so ADC was unaware of this until GMC alerted him that the S92 was on the runway after a JS41, had been cleared to land. The JS41 then initiated a go-around, and the S92 also recognised the situation and vacated the runway. During the go-around, the JS41 was visual with a previous departing helicopter, and adjusted their missed approach track coincident with the ATC resolution action. CAA Closure: As a result of this incident, the Tower controller produced a lesson learning document for dissemination within the unit. The unit will publish a local safety document reminding controllers of the importance of reinstating the 'ring of red' between runway movements and also highlighting to controllers the importance of carrying out a thorough runway scan. This AIRPROX has been subject to a separate review by the United Kingdom AIRPROX Board (UKAB). AIRPROX Board (UKAB) information indicates that this AIRPROX was due to the S92 pilot lining up without clearance. Contributory factors: 1. The Aerodrome controller did not operate the 'C3' stop-bar lights. 2. The Aerodrome controller did not see the S92 during his visual check and cleared the JS41 pilot to land on an occupied runway. A recommendation has been raised as a result of this AIRPROX.
201312671	03/10/2013	S92	Chip detector warning light.	Aircraft holding for inbound traffic. PAN declared due to chip detector warning light. Aircraft made immediate landing with fire services in attendance.
201312689	04/10/2013	S92	MAYDAY declared due gearbox pressure problems.	Aircraft diverted to an abandoned oil rig. Communications were established via another aircraft in the vicinity.
201312720	06/10/2013	S92	Loss of deconfliction minima between an S92 and an AS332 at 2000ft. Traffic info given.	The HELS controller had identified the potential conflict with the two helicopters due to their estimates earlier but became distracted by several GA light aircraft just prior to deconfliction minima being lost between the AS332 and the S92. The continued combining of the HELS/REBROS positions allowed the controller to be distracted by the GA traffic. When the controller tried to resolve the situation by instructing the AS332 to descend to 1000ft, the instruction was not read back correctly by the AS332. The AS332 did not hear the first instruction to descend, possibly due to interference on the frequency. CAA Closure: Appropriate unit action taken.

201312720	06/10/2013	AS332	Loss of deconfliction minima between an S92 and an AS332 at 2000ft. Traffic info given.	The HELS controller had identified the potential conflict with the two helicopters due to their estimates earlier but became distracted by several GA light aircraft just prior to deconfliction minima being lost between the AS332 and the S92. The continued combining of the HELS/REBROS positions allowed the controller to be distracted by the GA traffic. When the controller tried to resolve the situation by instructing the AS332 to descend to 1000ft, the instruction was not read back correctly by the AS332. The AS332 did not hear the first instruction to descend, possibly due to interference on the frequency. CAA Closure: Appropriate unit action taken.
201312900	09/10/2013	S92	PAN declared and aircraft returned due to smell of burning in cockpit.	Aircraft landed safely.
201313045	10/09/2013	S92	PAN declared due to smell of burning in cockpit during cruise with loss of weather radar and Electronic Control Systems (ECS).	The aircraft returned to base where an engineer was called to investigate. The circuit breaker for the cockpit evap/vent blower was found to have popped. The cockpit vent fan was removed and found to have signs of blade tip rub. The weather radar was checked with no faults found.
201313198	12/10/2013	S92	Tail rotor blade pivot bearing retainer debonded.	Defect found during scheduled 50hr inspection. Tail rotor pivot bearing retainer plate had migrated slightly. Movement had caused fretting marks on the pivot bearing. Defective blade removed and replaced.
201313243	16/10/2013	S92	Overflown maintenance.	When workpack was performed it was not closed off on the maintenance requirement system, resulting in the next check not being reforecast. By the time it was noticed, an overfly of 34.13hrs had occurred. Aircraft was immediately grounded until all overdue requirements had been carried out. All other aircraft checked to confirm no other non-closed workpacks.
201313253	16/10/2013	S92	FOD. Helicopter pilot, parking up on Spot 5, reported seeing a crushed drinks can blowing across the apron. An Ops vehicle was dispatched to collect the item.	
201313445	21/10/2013	S92	PAN declared due to nr2 FADEC power limit warning illuminated.	ECL consulted and speed reduced to a safe single engine speed, descent requested to 1000ft and aircraft routed direct to destination.

201313542	22/10/2013	S92	Helicopter cleared climb FL65 was observed climbing through FL70 and told to descend to FL65. Standard separation maintained. QNH986hPa.	Crew had failed to set the standard pressure.
201313944	29/10/2013	ATP	Unauthorised pushback.	An aircraft had called ATC to request pushback but subsequently pushed back from Stand 10, without authorisation, into potential conflict with a helicopter taxiing via Taxiway D and B to Spot 2. The helicopter stopped and was instructed to hold position. ATC rerouted the helicopter via Taxiway C. Supplementary 10/02/14: This unauthorised pushback was caused by the crew of the aircraft mistakenly thinking they had been given a pushback clearance. It is not clear why they believed this, as they commenced their pushback within 20 seconds of requesting it, during which time no reply was made to them by ADC, they did not read back a clearance to push, and nothing ADC said to other aircraft could be misinterpreted as a clearance for the aircraft to push. Both the ADC controller and the crew of the helicopter were quick to recognise that the aircraft concerned was moving, and ADC was able to initially stop the helicopter before there was any risk of collision and then offer them an alternative taxi route back to their parking spot.
201313944	29/10/2013	S92	Unauthorised pushback.	An aircraft had called ATC to request pushback but subsequently pushed back from Stand 10, without authorisation, into potential conflict with a helicopter taxiing via Taxiway D and B to Spot 2. The helicopter stopped and was instructed to hold position. ATC rerouted the helicopter via Taxiway C. Supplementary 10/02/14: This unauthorised pushback was caused by the crew of the aircraft mistakenly thinking they had been given a pushback clearance. It is not clear why they believed this, as they commenced their pushback within 20 seconds of requesting it, during which time no reply was made to them by ADC, they did not read back a clearance to push, and nothing ADC said to other aircraft could be misinterpreted as a clearance for the aircraft to push. Both the ADC controller and the crew of the helicopter were quick to recognise that the aircraft concerned was moving, and ADC was able to initially stop the helicopter before there was any risk of collision and then offer them an alternative taxi route back to their parking spot.
201313947	29/10/2013	S92	Flight crew inadvertently selected the go-around button on the Mode Select Panel and climbed from cleared altitude 3000ft to 3450ft before descending back to 3000ft. ATC informed. Standard separation maintained.	

201314206	04/11/2013	S92	A helicopter was observed taxiing along Taxiway C without clearance from GMC.	GMC questioned over the RT who the helicopter was and one of the pilots responded. GMC subsequently instructed the flight to hold at C2, which was read back correctly. Helicopter flight crew apologised. The ATC investigation into this event concluded that it was the result of the crew experiencing a memory lapse that resulted in them taxiing along their normal route without having requested, or been issued with, any ATC clearance to do so. No other aircraft were affected by this manoeuvre.
201314278	06/11/2013	S6	UK AIRPROX 2013/154 - S92, in receipt of a Traffic Service and a primary contact only Rans S6, 16nm Northwest of Aberdeen Airport in Class G airspace.	The S92 was in receipt of a Traffic Service from Aberdeen Radar and was being transferred to Lossiemouth Radar at the time of the incident. The S6 was not visible to the Aberdeen Radar controller, who was utilising the Perwinnes radar. At the time of transferring the S92, the Aberdeen Radar controller was also dealing with the unexpected consequences of another incident on the aerodrome, however, the controller did check an adjacent radar display at the time of the S92's report and the S6 was not readily distinguishable on the adjacent Allanshill display. The S6's poor radar reflection properties, combined with the absence of a transponder, compounded both ATC and the S92 pilot's abilities to spot the confliction prior to the AIRPROX. After the incident, the Captain of the S92 discussed the event with the Aberdeen ATC who highlighted to the S92 operator's Flight Safety Manager that the possible distances between aircraft in receipt of a Traffic Service could be less than if the operator's aircraft were in receipt of other services available from Aberdeen, such as a Deconfliction Service or Radar Control Service. CAA Closure: This AIRPROX has been subject to a separate review by the United Kingdom AIRPROX Board (UKAB). AIRPROX Board (UKAB) information indicates that this AIRPROX was a sighting report.
201314413	08/11/2013	S92	S92 at 3000ft commenced descent without request/acknowledgement from REBOS. On being questioned the crew believed they had done so a few mins before.	Reporter states that RT loading was quite busy at the time and several calls from aircraft had been missed/unreadable. Supplementary 14/02/14: This level bust was caused by the crew of S92 mistakenly believing that their request for descent had been acknowledged by the REBROS controller. Although difficult to prove, it is possible that the crew did request descent and that this was blocked out by another call on frequency at the same time. It is also possible that their readback of the descent instruction was also blocked out. However, when replying to the other call, the REBROS controller used the other aircraft's callsign, which is only similar to the S92 in that it also ends in "Bravo". At no time during or after that exchange did the REBROS controller use or refer to the callsign of the S92. No other traffic was affected by the level bust.
201314705	14/11/2013	S92	Overfly of maintenance.	There had been a problem with the aircraft's APU. On correcting the problem it was discovered that the A/C had overflown maintenance task 37202 750 SCY DET. Shift supervisor and Part M Post holder were informed.

201314805	15/11/2013	S92	Overfly of maintenance.	After yesterday's problem with its APU, it was decided to check the fleet. It was found that this aircraft's APU had stopped being updated in July. It had been fitted in January and there had been a counter change prior to that. The correction to the appropriate counter wasn't made then but the APU was being updated. It is unclear as yet why updating stopped in July. Again, the due inspection was overflown.
201314948	18/11/2013	S92	Aircraft landed on the wrong ship.	The ship was in the position expected, the weather was good with a few areas of drizzle and the light was grey approaching twilight. There was a little confusion trying to get deck clearance and eventually got clearance about 1.5nm from the boat on a left base. As the aircraft turned onto finals an erroneous wind indication was given of 40-60kts from the East. The shape, colour and position of the cranes on the boat were all as expected. Various issues near to landing regarding radio frequencies, incorrect FMS wind, passage of vessel movement information that had not been requested and also the position of boat markings in the fading light all lead to a landing on the incorrect ship. The passengers and destination ship were informed and the PNF went to speak to the Captain of the ship. Aircraft departed and continued with the tasking.
201314955	20/10/2013	S92	Laser attack.	
201314979	18/11/2013	S92	S92 departing R/W34 given heading instruction 010deg. A/c checked in turning right onto heading 100deg coincident with a call from Tower that the a/c was observed turning further right than cleared. A/c given a corrected heading.	Crew selected heading 100deg in error. Standard separation maintained.
201315250	21/11/2013	S92	Collective trim actuator runaway down. Aircraft returned.	PF reported feeling successive judders in the collective after engaging the trim release button with the intention of pulling power. This was shortly followed by the FD DGRD caption. Autopilot soft reset carried out and caption extinguished. Upon releasing the trim release button to re-engage the collective trim actuator the PF reported that the collective was motoring downwards of its own accord, unless restricted by him or when the trim release button was held in. Commander took control in order to confirm his experience. Having confirmed his report controls were returned to him. Decision made to return. □ CAA Closure: □ After investigation the root cause was inconclusive. No further action practicable.

201316007	09/12/2013	S92	UK AIRPROX 2013/178 - Two S92s on approach 4nm North East Scatsta Airport. Both pilots report TCAS TA.	The AIRPROX occurred when the S92(2) operating VFR and the S92(1) operating IFR came into proximity whilst operating in Class G airspace in the vicinity of the Scatsta ATZ. A number of factors were considered to have been contributory. a) The tighter than normal circuit pattern of the S92(2), 0.5nm displaced from the centreline likely initiated the TCAS alert. b) The S92(1) was IMC and focussed on the SRA to ½nm and the pilot was not aware of the other helicopter joining downwind. c) The S92(2) joined through the overhead on a northerly track before turning downwind into a tighter than normal traffic pattern, which may not have been immediately apparent to the Tower controller. CAA Closure: The CAA is content with the action being taken by the ATSU to examine unit procedures and the provision of traffic info for the integration VFR and IFR traffic into the circuit. This AIRPROX is to be subject to a separate review by the United Kingdom AIRPROX Board (UKAB).
201316133	13/12/2013	S92	PAN declared and aircraft returned due to engine chip caution during the climb.	Whilst I was on duty as the Radar controller, the pilot called a PAN, reporting a minor engine malfunction, at time 1013. Having acknowledged the PAN and ascertained SOB I requested the pilot squawk 7700 and began to vector the aircraft for a localiser/DME approach to runway 09 which was in use at the time. The Pilot requested a VFR recovery but once I passed the latest visibility and cloud ceiling, an IFR recovery was accepted. At 1025 I transferred the aircraft to the Tower on and the aircraft landed without further incident at 1030. Supplementary 13/12/13: In the climb to 3000ft, ENG 1 CHIP caution illuminated. Immediate actions were followed and airspeed reduced to 100kts for safe single engine speed. The caution went out and came on again, this happened three times. The cruise checks were carried out followed by the subsequent actions which included retarding the throttle to idle. A PAN was declared and radar vectors given for the localiser 09 approach as a visual approach was not possible due to the cloud base being 400ft. We briefed the passengers that we had a technical fault and were returning. A running landing was carried out and the engine was shut down after landing. We taxied to the stand to drop off the passengers and then repositioned to the hangar after cancelling the PAN. Although the flight was very busy we had time to brief everything that was required and discuss the considerations for a running landing. Supplementary 13/12/13: The aircraft had departed at 1006z cleared direct to 3000ft. At 1014z a call was received stating that the aircraft had declared a PAN, PAN with 'minor engine issues' and was returning to departure airport. 20 POB. A full emergency was initiated. The aircraft landed at 1030z without incident. Fire chief stood down incident at 1036z. METAR 1020z 16013kt 8000 BKN004 10/10 Q1005.

201316328	16/12/2013	S92	Exhaust cover assembly missing.	During scheduled post flight inspection nr2 engine exhaust pipe cover assembly missing, presumed detached in flight. This left the attachment bolts and nuts still fitted and secure. CAA Closure: Cover assembly replaced with new item. Fleet Inspection already in place - event reported to the manufacturer. The manufacturer's tech rep suggests it may be specific to this A/C or engine; further checks have been carried out on the engine installation and no faults evident. D-swirl duct to be replaced on this engine and occurrence to be monitored for further trends. No further reports to date.
201316545	07/12/2013	S92	Green laser attack.	
201316662	23/12/2013	S92	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 bought 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.
201400214	01/01/2014	S92	Master Caution illuminated, with AC GEN 2 FAIL illuminated.	On reaching 3000 carrying out cruise checks the Master Caution illuminated, with AC GEN 2 FAIL illuminated. The AP 2 light also illuminated indicating off line followed by AVC dropping off line. EOPs carried out and gen reset once. Subsequently failed again, this time with the above plus Capts PFD screen (MFD#4) temporarily dropping off line. EOPs carried out and aircraft returned to base.
201400396	11/01/2014	S92	Main gearbox oil pump lug found sheared off.	During removal of MGB R/H oil pump, one of the 2 retaining lugs found sheared off. CAA Closure: Pump replaced and ground runs and flight test completed. Manufacturer is progressing with modification.

201400561	15/01/2014	S92	Dangerous goods confusion.	Received some freight from previous sector. After take-off flight crew flew to the next sector there the HLO asked if the freight was for them because the freight had no labels on it. On the manifest it showed it was for a different sector but it also said it was Dangerous Goods. Freight was identified as not Dangerous Goods but packaged as such.
201401048	29/01/2014	S92	Intermittent 'ENG PWR LIMIT' caption.	During descent to winch at cliff, eng 2 TGT display showed red dashes with associated 'ENG 2 PWR LIMIT' caption. EOP actions carried out and decided to curtail sortie. Whilst recovering to base, caption illuminated intermittently. On two occasions, the 'FADEC NO DISPATCH' caption also illuminated intermittently.
201401051	29/01/2014	S92	Sponson ruptured during pressure refuel.	Crew change had just been completed and the aircraft was being refuelled when crew members heard a thud. This was soon followed by another thud and then a series of smaller thuds. The crew discussed shutting the aircraft down as soon as we were able, to ensure personnel were clear. The refuelling personnel indicated that refuelling should cease immediately, closely followed by the engineer conducting an external inspection of the aircraft who instructed us to shut the aircraft down. The fuel indication at the time of shutdown was 2990lbs and roughly balanced between the two tanks. The aircraft was shut down and fire cover was requested from ATC. On inspection, the LH fuel sponson had ruptured, however there was no fuel leakage. The crew stayed on the scene until they were happy that the engineers, bowser driver and the fire fighters had the situation under control.
201401076	30/01/2014	S92	Helicopter failed to follow clearance to remain North of the centreline and was observed turning South, away from its planned route/clearance and headed through the instrument approach for R/W09.	The S92 crew booked out prior to departing VFR from Sumburgh. R/W15 in use with a SF340 being positioned for ILS R/W09. On departure the S92 was coordinated with radar and cleared with a LTO to leave the zone via SPIGGIE (3NW) to remain clear of the SF340. Radar had approved the departure provided the S92 did not cross the R/W09 centreline. Both ADC and RADAR anticipated that the S92 would leave the zone to the North. The S92 reported the SF340 in sight and advised outbound via STIGGIE then turning left to clear the field to the South but this was missed by ADC. The S92 was transferred to radar and crossed the R/W09 centreline. When asked, the S92 pilot confirmed a routeing South to operate with a vessel 10-15nm South of Sumburgh. The SF340 was no longer a factor and the S92 was allowed to continue. The root cause of the incident occurring was that there was a misunderstanding between the ATSA and the crew when they booked out. This resulted in the crew believing that they had advised their sortie requirements to the South, but ADC & RADAR believed that the S92 was leaving to the North. CAA Closure: The ATSU have made the crew aware of the confusion in the passing of the information.

201401608	11/02/2014	S92	PAN declared due chip warning on intermediate gearbox.	Aircraft inbound, called PAN due chip warning on intermediate gearbox. I acknowledged the PAN, cancelled his hold and speed restrictions (due multiple fixed wing and helicopter inbound and routed him to the ADN for a priority The pilot advised me that he would be at 80kts. He was then transferred to INT and landed safely at 1037. WM helped me inform all the relevant agencies. Supplementary 11/02/14: During flight, we had caption IGB CHIP. Consulting the emergency operating procedures (EOP) checklist, we had only one indication of IGB CHIP. Following the EOP, immediate actions were nil, subsequent actions were to reduce speed to 80kias and land as soon as possible. We informed ATC with a PAN call and requested priority for landing. During the flight we monitored for any unusual noise, vibrations and pedal kicks to which there were no indications of anything further. We briefed the passengers and continued for an ILS runway 16.
201401753	12/02/2014	S92	Main airstair door jammed on arrival.	When we stopped on the hot spot to disembark the passengers, the ground staff and engineering staff were unable to open the main air stair door. Aircraft was shut down and the passengers exited through the rear RH emergency exit. CAA Closure: The cause of the door jam was due to play between the locking pin and a roll pin which is a known issue to the operator and of which has been highlighted to the manufacturer. A Technical Directive has also been issued for Engineering to remove the pins and inspect for wear. The normal period when the roll pins are removed for inspection is every 750 flying hours. This inspection will now be carried out every 375 flying hours.
201401755	13/02/2014	S92	Door caption.	As we lifted into the hover to commence take-off run, the door open caption came on. We pulled off the main runway at D2 and landed. By that time, the caption had gone out. A visual inspection of the door was carried out by the co-pilot and the door was confirmed as secure. The flight was continued without any further incident.

201402175	22/02/2014	S92	Collective trim runaway.	On departure for Track and Balance air test, we engaged the upper modes IAS and ALT-P. IAS engaged in the pitch axis and ALT-P in the collective. Aircraft continued to climb through the selected alt, decoupled ALT-P and attempted to descend to 1200feet. Reduced power and recoupled ALT-P in the descent, aircraft immediately began to climb again. Torque was increasing steadily at approx 2%per sec. Deselected ALT-P and decoupled the collective trim, consulted the ECL and declared a PAN, RTB. Landed RWY 16 no further incident. Supplementary 22/02/14: I was on duty as the ADC with Air and GMC positions band boxed. Prior to me taking over control at approximately 1900z, the aircraft had started for an air test, requesting a wide visual circuit. This followed a series of engine ground runs and an earlier sortie which had been abandoned during the pre-departure hover-check. Aircraft departed RW16; when approximately 3 nm SE of airport, at 1912z a PAN was declared. The PAN was acknowledged, the pilot confirmed a control trim runaway issue which was not serious, 4 SOB. PAN aircraft was instructed to join downwind left hand for either RW16 or H23; the pilot elected for RW16. A Local Standby was initiated at 1914z, and the ATC Watch Manager informed. PAN aircraft landed at 1919z, and was able to taxi to parking area, contacting Fire on 121.6. Thereafter Fire 1 reported that the aircraft was safe: the local standby was terminated at 1922z.
201402261	23/02/2014	S92	Green laser attack.	
201402491	28/02/2014	S92	Defect expiry date exceeded. Variation granted.	Mis-calculation of expiry date of air conditioning system B defect. Variation issued.
201402569	14/02/2014	S92	Tooling left on aircraft.	The aircraft came back with a fault on the #2 measuring head for the RIPS. I decided to replace the measuring head on the apron. I picked a small carrying toolbox with 5 different size spanners (because I did not know the size of the union that needed to be replaced from the old measuring head to the new one) and a screwdriver and replaced the measuring head while standing on the sponson.I used the 1 inch spanner for replacing the union and left the spanner on the sponson next to the toolbox. After the replacement of the measuring head I put the carrying toolbox inside the hangar and went to OPS to sign of the Tech Log for the replacement of the head. The pilot took the Tech Log, went to the aircraft and flew of.10 minutes after takeoff I went back to the carrying toolbox to put all the tools away and the 1 inch spanner was missing. Then I knew I left it on the sponson.I went directly to the supervisor on shift to tell about the missing tool, and directly to OPS and they called to the airport to check for a spanner on the apron, taxiways and runway. Nothing was found and later the HLO on the platform found the spanner still lying on the sponson where I left it. For luck the spanner is back and nothing bad happened extra.

201402781	09/03/2014	S92	PAN declared due small cabin fire from the Captain's TCAS module. Aircraft made precautionary landing.	I received a PAN call advising me that they had a small cabin fire from the Captain TCAS module and were making a precautionary landing, they passed the position in Lat and Long. I acknowledged their call and observed the aircraft on radar, confirming their position. The next call saying that they had landed safely on the ground. I advised my WM and ADC who called the local emergency services. Subsequently aircraft called airborne and downgraded/cancelled the pan as they had isolated the TCAS module and were en route to pick up a crewman from a vessel. Supplementary 09/03/14: Whilst carrying out SAR winch training with vessel, smoke was detected in the cockpit and found to be emanating from the TCAS 2 display in front of the Captain. The aircraft was flown to a nearby island and landed as a precaution whilst a PAN call was made to ATC. The TCAS circuit breaker was identified, pulled and smoke dissipated. The unit was not hot to touch hence aircraft was repositioned to recover winch man from vessel and return to base. TCAS/VSI found to be cause of smoke, removed and to be replaced. Function checks to be carried out.
201402883	09/03/2014	S92	Display Control Panel (DCP) barometric runaway.	Adjusted the Captain's side hPa scale for a 4hPa pressure difference and the result was around 10hPa jump. The aircraft was coupled to FD1 so no aircraft attitude change this time. Investigation under 201402931.
201402931	09/03/2014	S92	Display Control Panel (DCP) barometric runaway.	In the cruise it was necessary to change from the regional altimeter setting to the destination altimeter setting. This was a 1hPa difference; however the captains altimeter jumped from 1014hPa down to 965hPa (over 1000ft). The aircraft was coupled to FD2, so the aircraft immediately a climb to try to regain 2000ft. In the event the aircraft climbed an uncommanded 200ft before datums were reset. This is still a continual problem with this aircraft type.
201403019	12/03/2014	S92	Before landing checks not completed, landing gear not selected down.	The crew elected to do a manual ILS to runway 16 for training purposes in Cavok conditions. Initial approach checks were completed prior to coasting in. Final checks were also completed at the appropriate time. The Before Landing checks however were missed by the crew. This resulted in a terrain warning as the landing gear was not selected down. This error was rectified and the landing proceeded without incident.

201403028	13/03/2014	S92	PAN declared and aircraft returned due to possible engine fire.	In Cruise at 3000 ft, a spurious ENG #2 FIRE warning was noticed and Aural warning was heard. Decision to consult ECL and to start a right hand turn was commenced. As the turn was initiated the fire warning signs extinguished. No signs of smoke or erratic engine indications were noticed. Blue sky quick position was engaged and ATC was in formed with a PAN call. RTB without further problem. Supplementary 13/03/14: Aircraft requested to make a right hand orbit, which was granted and requested to advise their intentions once the orbit was completed. The pilot advised that they intended to return to departure airport and requested a descent to 2A, which was granted routing direct to GSE or the ATF as required. The routing to GSE for VFR was accepted. I asked the pilot if they wished to declare an emergency. Aircraft declared at PAN due to an indication of a possible engine fire. The PAN was acknowledged and aircraft was instructed was to squawk A7700. Which they did. Pilot advised that they believed the fire indication was spurious and they were operating normally on both engines, they had not seen any smoke trail during the tight orbit. Another aircraft inbound for the ILS, approximately 8nm north of this one, offered to escort the aircraft to the field but pilot declined the escort. The duty watch manager, INT and ADC were briefed on the situation and of the aircraft intentions. Aircraft was cleared to enter CAS routing direct to airport not above 2A, transferred to airport ADC and landed safely.
201403318	20/03/2014	S92	Nr2 engine failed in cruise.	In the cruise at 2500ft nr2 engine fuel pressure illuminated followed immediately by engine nr2 failure. Carried out the appropriate drills in the emergency checklist - briefed passengers and carried out a single engine running landing without further incident. Engineering investigation in progress with the assistance of the OEM. Initial thoughts were that the fuel pump was faulty causing fuel starvation but this was not the case. Additionally, the fuel samples taken were also clear and the technical investigation continues. Supplementary 20/03/14: I was working as Hels controller when a helicopter inbound declared a PAN with single engine failure whilst in the descent. The aircraft requested to route dct to the field. In conjunction with the WM and ops. room team all the relevant authorities were informed. Another helicopter in the vicinity was vectored to assist and subsequently shepherded the emergency aircraft inbound. The aircraft landed safely.

201403428	22/03/2014	S92	PAN declared due to nr1 engine chip warning. Aircraft returned.	Aircraft was operating low level on a VFR training sortie when at time 1038 they called PAN PAN declaring an engine malfunction and return. They were instructed to squawk 7700, which they did and returned for a VFR arrival. One engine was shut down but no further assistance was required. They landed safely at time 1101. Supplementary 22/03/14: At 1038 radar called to inform me aircraft was north of the CTR returning to the field after declaring a PAN due to an engine malfunction. A full emergency was initiated. I was then informed aircraft had shut down one engine and was flying on his number 2 engine only, which was passed onto the fire chief. Aircraft landed safely with the AFS remaining in position until he shut down. The full emergency was stood down at 11.09. Supplementary 22/03/14: During a continuation training sortie as the aircraft came to a relative hover alongside a local ferry the ENG 1 CHIP caution illuminated intermittently. We immediately diverted the aircraft and during the transition to cruise flight the ENG 1 CHIP caption remained on. The EOP was consulted which resulted in the aircraft returning with the affected engine at idle. We declared a pan call and landed via a running landing. Chip detector inspected and cleaned no ferrous debris but small amount of carbon in chip detector basket. GE inspection and clean inspection carried out and ground run leak check carried out satis.
201403494	23/03/2014	S92	PAN declared and aircraft returned due to 'ENG 1 CHIP' caution.	At 11:20, shortly after departure, the aircraft declared a PAN due a chip warning light and would be landing with single engine on runway 27. Full emergency was initiated. Aircraft landed safely at 11:26 with the AFS remaining in position until he shut down. The emergency was stood down at 11:30. Supplementary 23/03/14: On levelling, shortly after take-off, 'ENG 1 CHIP' caution illuminated. Actions carried out iaw EOPs, retarding nr1 engine to idle and a single engine running landing was carried out with no further incident. Nr1 engine secured and aircraft ground taxied to dispersal for shutdown. Chip detector inspected, no debris found, suspect chip detector replaced iaw AMM. Ground run and leak check carried out satisfactorily.
201403592	24/03/2014	S92	UK AIRPROX 2014/032 - Inbound S92 and outbound S92, same company, at 1500ft North of Scatsta. Both aircraft received/complied with TCAS RA.	The AIRPROX occurred when the S92(2) operating VFR and the S92(1) operating IFR came into proximity whilst operating within Class G uncontrolled airspace in the vicinity of the Scatsta ATZ. The controller had provided the departing IFR S92(1) with traffic info and had provided the arriving VFR S92(2) with sufficient traffic info in order to allow its safe integration into the circuit pattern. The pilots of both aircraft had reported visual with each other, however their relative positions generated a TCAS RA which both pilots followed. CAA Closure: The controller ensured that both pilots were visual with each other, however both pilot received and responded to the TCAS RA. The ATSU reported that as a result of two recent AIRPROX reports involving aircraft from the same company, they had been in discussion with the company to examine procedures and the provision of traffic info regarding the integration of VFR and IFR traffic. The discussion is ongoing to examine; the use of VRPs; the use of noise abatement speed control measures at and below 2000ft and; was likely to conclude that all inbounds from the NE will join downwind right-hand when R/W06 is in use. This AIRPROX will be subject to a separate review by the United Kingdom AIRPROX Board (UKAB).

201403727	28/03/2014	S92	Runway incursion. S92(1) crossed R/W24 holding point without ATC clearance whilst S92(2) had been cleared to land. Traffic info given.	S92(2) cleared to land runway 24 on a four mile final, S92(1) on the apron given taxi instructions to the rear of stand two, S92(1) crossed the runway holding point without clearance, The duty ATCO attempted to stop the aircraft but transmissions crossed. The ATCO could have cancelled landing clearance for the inbound S92(2) but elected to instruct S92(1) to continue taxi to stand as this was the most expeditious method of clearing the runway. Supplementary 01/04/14: From the N apron we requested taxi for pax pup. ATC instructed us to position to the rear of spot 2 (on the S apron) in order to enable the aircraft on that spot to reposition onto the Northern apron. We followed the yellow taxi line which takes you through the alpha hold and re-crosses the bravo hold onto the southern apron and leads to spot 2. As our clearance wasn't to the Alpha hold I assumed that the instruction to position to the rear of spot 2 implied ATC were happy for us to do this. As we approached the alpha hold I told the LHS I was going to confirm with ATC that we were clear to cross the alpha hold en route to spot 2. I believed that I transmitted at the same time as ATC instructed me to hold at alpha, by which time I had crossed alpha and we were crossing bravo onto the southern apron. ATC informed me that I hadn't been cleared to cross alpha. I acknowledged this and apologised.
201403727	28/03/2014	S92	Runway incursion. S92(1) crossed R/W24 holding point without ATC clearance whilst S92(2) had been cleared to land. Traffic info given.	S92(2) cleared to land runway 24 on a four mile final, S92(1) on the apron given taxi instructions to the rear of stand two, S92(1) crossed the runway holding point without clearance, The duty ATCO attempted to stop the aircraft but transmissions crossed. The ATCO could have cancelled landing clearance for the inbound S92(2) but elected to instruct S92(1) to continue taxi to stand as this was the most expeditious method of clearing the runway. Supplementary 01/04/14: From the N apron we requested taxi for pax pup. ATC instructed us to position to the rear of spot 2 (on the S apron) in order to enable the aircraft on that spot to reposition onto the Northern apron. We followed the yellow taxi line which takes you through the alpha hold and re-crosses the bravo hold onto the southern apron and leads to spot 2. As our clearance wasn't to the Alpha hold I assumed that the instruction to position to the rear of spot 2 implied ATC were happy for us to do this. As we approached the alpha hold I told the LHS I was going to confirm with ATC that we were clear to cross the alpha hold en route to spot 2. I believed that I transmitted at the same time as ATC instructed me to hold at alpha, by which time I had crossed alpha and we were crossing bravo onto the southern apron. ATC informed me that I hadn't been cleared to cross alpha. I acknowledged this and apologised.

201403741	29/03/2014	S92	Altitude deviation. Helicopter descended without clearance.	I had just finished giving information to fltnum86S about traffic to affect his climb from the Safe Caledonia installation coming back to Aberdeen. I looked at the aircraft to give traffic about the aircraft that will be climbing through its level (A30) and noticed that it was passing A22 in the descent, I asked the aircraft to confirm its level, to which I got no response. I asked the aircraft to confirm that they had asked for descent to which the pilot replied 'Affirm', I was confused and the certainty in her voice made me doubt if she had requested descent or not. It had no effect on safety or I did not request her to stop at an intermediate level as she was clear of traffic. I then had it confirmed from the watch manager that the pilot did not request descent on my frequency. Supplementary 31/03/14: On passing 80miles on the 071 HMR we were handed over to 132.550 radar frequency. We passed the flight watch, completed the descent checks and started the descent. On passing 2000ft ATC asked us whether we requested descent, we realised we had not contacted ATC before initiating descent. Supplementary 20/06/14: This level bust occurred when the helicopter commenced descent from 3000ft without advising and obtaining a response from the Rebros controller, as required on an Offshore Traffic Service. It is not clear why this happened. At the time of the incident, the Rebros controller was uncertain whether the helicopter had requested descent, and the pilot on the R/T responded that they had. However, no call from the helicopter is heard on the
201404299	09/04/2014	S92	Double autopilot failure.	Compasses in DG hdg miscompare on MFD in flight. Adjusted and realigned compasses. Shortly after, both autopilots failed with associated cautions. EOPs consulted and a reset cleared the issue.
201404300	10/04/2014	S92	PAN call due to severe vibration. Aircraft returned.	I was radar controller when aircraft reported severe vibration was returning to platform. I asked aircraft if they wished to declare and they declared a PAN. I instructed aircraft to squawk 7700 when able and informed all relevant agencies. Aircraft report landed safely and shut down. Supplementary 10/4/14: Unusual vibration felt after take-off from platform. Climb continued to 2000ft to establish if the vibration would decrease with increased airspeed. The vibration continued. A pan call was made declaring the nature of the emergency, number of POB and intention to return. Pan acknowledged and transponder code 7700 selected. The vibration continued during the descent. Tail rotor authority confirmed before landing. Aircraft shutdown for further investigation. Engineers winched down later in the day. After investigation and air-test the next day, aircraft returned without passengers. Further investigation to aircraft continued.OIM and passengers briefed by both crew and engineers. Supplementary 14/4/14: The vibration was described as a rumbling cobblestone type vibration normally associated with a 4p vibration and there were no other abnormal indication or captions. The mornings flights were downloaded from HUMS laptop and no obvious increase in readings but it was noted that the vertical 1p vibration was slightly higher than we would normally aim for in certain regimes. The MRH and MRB were inspected for any apparent defects but none were found but it was noted that two dampers were nearing the fill mark. Main rotor dampers were filled and bled and a rotor smoothing data gathering flight carried out. Air tests were unable to reproduce the vibration. Recommended adjustments were carried out and the 1p vibration levels smoothed to a more comfortable level.

201404497	10/04/2014	S92	Pilots reported a fuel smell in the cockpit and cabin.	Pilots reported a fuel smell in the cockpit and cabin. A ground run was carried out which confirmed there was substantial fuel leak from the nr2 engine FMU. The leak was originating from the body of the unit, but the FMU was removed to confirm the leak was not from the attachment flange. All of these o-rings were in good condition. The FMU was replaced and subsequent ground runs/tests carried out.
201404796	06/04/2014	S92	Fuel leak from RH side of FMU.	During the daily inspection it was noticed that there was a fuel smell present when inspecting the number 2 engine. A ground run was carried out and a fuel leak was discovered from the number 2 Fuel Metering Unit. The leak was coming from a small port on the R/H side of the FMU which is normally covered by a Fireproof jacket/cover. This was the second FMU found to be leaking fuel, within the company fleet, in one week. W/O refers.
201404798	15/04/2014	S92	PAN declared due to two spurious engine fire warnings during flight.	X2 spurious No2 engine fire warnings reported by aircrew in flight. Aircraft declared PAN and landed safely. After consultation, with manufacturer rep, No2 outboard flame detector replaced with new item due to known historic fault with detector P/N: 92552-04112-042.
201404999	23/04/2014	S92	Excessive wear found on main rotor head rotating scissors.	During investigation into reported notchy vibration from MRH when yaw pedals are moved, the M.R. pitch rods were disconnected to evaluate the cause of the swash plate uniball juddering when collective pitch applied (which was the source of the vibration). It was then apparent that the yellow position rotating scissors middle hinge had excessive play due to wear. On dismantling it was found that the fwd Teflon coated bearing had worn completely through one side and that the wear had continued into the steel bushing in the scissor link itself. This amount of wear was masked by the tension of the elastomeric bearings when the pitch rods were connected. OEM informed.
201405224	28/04/2014	S92	PA38 departed without ADC take-off clearance. Traffic info given.	Departed without a take off clearance. Aircraft was given a clearance to enter, back-track and line-up for RW13, and report ready for departure. Aircraft reported ready for departure, to which I responded "roger" and immediately ascertained the position of an overflying S92 within the ATZ, and passed traffic information on the aircraft shortly departing, climbing through the level of the S92. Traffic information was then passed to PA38 on the overflying S92, at which point I observed PA38 just airborne. PA38 had departed RW13 without a take off clearance.

201405339	30/04/2014	S92	Loss of wake turbulence separation between arriving S92 and departing C560.	Inbound helicopter S92 - arrived from the South. Given clearance to cross R26 at the midpoint to land at C1. C560 - was given take off clearance once S92 had vacated. However C560 rotated before C and therefore had less than the prescribed wake turbulence minima. The C560 pilot did not question the take off instruction with regards to the crossing helicopter type. Supplementary 02/05/14: The R/T and SMR recordings have been reviewed. The Air controller has stated that there was not much to remember, other than the C560 was lined up holding position, and warned of the crossing S92 at the midpoint. The S92 was vacated, and I gave take off clearance. I remember thinking that the helicopter was larger than our regular ones, but the wake turbulence category line on the EFPS strip was not in the usual format, so it did not register. By the time a colleague had alerted me to the fact, the C560 was rolling and it would have been unsafe to stop it. The C560 rotated just a few metres short of C, and I think there was about 2 minutes time separation. The crew did not raise any concerns about the required spacing either, even though they could see, and knew, the helicopter type.
201405339	30/04/2014	560	Loss of wake turbulence separation between arriving S92 and departing C560.	Inbound helicopter S92 - arrived from the South. Given clearance to cross R26 at the midpoint to land at C1. C560 - was given take off clearance once S92 had vacated. However C560 rotated before C and therefore had less than the prescribed wake turbulence minima. The C560 pilot did not question the take off instruction with regards to the crossing helicopter type. Supplementary 02/05/14: The R/T and SMR recordings have been reviewed. The Air controller has stated that there was not much to remember, other than the C560 was lined up holding position, and warned of the crossing S92 at the midpoint. The S92 was vacated, and I gave take off clearance. I remember thinking that the helicopter was larger than our regular ones, but the wake turbulence category line on the EFPS strip was not in the usual format, so it did not register. By the time a colleague had alerted me to the fact, the C560 was rolling and it would have been unsafe to stop it. The C560 rotated just a few metres short of C, and I think there was about 2 minutes time separation. The crew did not raise any concerns about the required spacing either, even though they could see, and knew, the helicopter type.

201405506	02/05/2014	S92	Overfly of inspection due to missing information in aircraft maintenance database.	Overfly on task 62-24-01-220-001 750hr inspection- M/R YOKE TO DAMPER ASSEMBLY ATTACHMENT - INSPECT. This task card was in the maintenance program, approved, but for some reason it was not initialised during initial bridging checks from one database to another. Two aircraft have overflown the requirement. There is no easy way to determine task cards that should be initialised from ones that are not required. Afternote: Both tasks have now been put at the top of the due-list and will be done before the next flight. A full 100% audit on un-initialised work cards has been completed to see if this is an isolated event or an event which will need correction - no other similar task cards have been found that have not been initialised. Root cause: The task card 62-24-01-220-001 was incorrectly set up in the maintenance database, it was set up as a MG and not regularly checked by Part M. Short term corrective action: The task cards have been corrected and are now being initialized. Longer term corrective action: Information is being sent to the fleet teams and tech records about the importance of checking 1895 and 249 for uninitialized task cards or requirements. Adding two more steps in bridging to catch items on due list that are not in the instructions (i.e. MG) and a check for correct disposition.
201405506	02/05/2014	S92	Overfly of inspection due to missing information in aircraft maintenance database.	Overfly on task 62-24-01-220-001 750hr inspection- M/R YOKE TO DAMPER ASSEMBLY ATTACHMENT - INSPECT. This task card was in the maintenance program, approved, but for some reason it was not initialised during initial bridging checks from one database to another. Two aircraft have overflown the requirement. There is no easy way to determine task cards that should be initialised from ones that are not required. Afternote: Both tasks have now been put at the top of the due-list and will be done before the next flight. A full 100% audit on un-initialised work cards has been completed to see if this is an isolated event or an event which will need correction - no other similar task cards have been found that have not been initialised. Root cause: The task card 62-24-01-220-001 was incorrectly set up in the maintenance database, it was set up as a MG and not regularly checked by Part M. Short term corrective action: The task cards have been corrected and are now being initialized. Longer term corrective action: Information is being sent to the fleet teams and tech records about the importance of checking 1895 and 249 for uninitialized task cards or requirements. Adding two more steps in bridging to catch items on due list that are not in the instructions (i.e. MG) and a check for correct disposition.
201406043	13/05/2014	S92	S92 observed taxiing with front chock still in place. S92 was stopped and chock removed. S92 continued to taxi with no further problems.	Taxi with chocks still in. S92 parked on the North East apron was chocked for refuelling by myself. On taxi at 17:42L I notice that the chocks had not been removed and the helicopter was pushing the front chock with it on taxi. I immediately contacted ATC to stop the aircraft on the echo taxiway then proceeded to helicopter to remove chock. Reported to ATC that chock was removed and helicopter proceeded with no problems. Supplementary 21/05/14: During initial taxi restriction felt in forward motion, advised by ATC a chock was still in place. Chock removed taxi resumed.

201406332	19/05/2014	S92	Spurious fire warning engine 2.	In the cruise, Master Warning "FIRE" aural alert "Fire Engine 2" for a period of two seconds. Engine was within normal parameters, TGT 820, no other signs of smoke etc. Sunlight was shining on starboard side and conclusion was spurious warning. No further action required and flight continued without further warnings. Tail mounted cameras would have been an advantage in this situation. Crew actions correct.
201406526	22/05/2014	S92	Contaminated fuel sediment sample.	Aircraft landed on the Balmoral with the intention of taking a refuel of 500lbs, fuel water tablet shown to crew on landing as correct. Co-pilot requested to see a sediment check of the sample prior to refuel as normal practice during deck duties. On inspection, black granular sediment (pinch of large pepper granules) seen in the check at the bottom of the sample jar. Fuel operative advised to quarantine the sample for investigation, refuel not conducted and deck HLO informed. Aircraft returned with current fuel load on board 348lbs above the minimum required for lift.
201406618	24/05/2014	S92	Altitude deviation. Helicopter failed to maintain altitude of 4000ft and observed with Mode C indicating 3600ft descending.	Aircraft called me on handover from Kirkwall maintaining 4000ft. I identified him and gave an Offshore Deconfliction service SSR only. At 0953 I saw the Mode C readout indicate 36A descending. I questioned the pilot who said that the descent was inadvertent. I then gave further descent to 2000ft on the Aberdeen QNH 1015. At 0959 I noticed the Mode C readout indicating 18A descending. Again I questioned the pilot and asked if he was having problems with the a/c. He apologised again and said he had no problems with the a/c. Supplementary 30/05/14: On the way back from the Clair I started to descend without clearance. I was under the understanding that we were under a Basic Service to join West of Old Meldrum Mast not above 2000ft, and planned to initiate a descent just South of Wick for a let-down to 1000ft if required to ensure VMC well before landfall; this was not the case, we were under a Traffic Service. During the descent ATC confirmed that we had started to descend, and cleared us to continue the descent (to 2000ft, as it turns out). But we continued the descent with our original, but flawed plan, down to 1000ft. This was again picked up and cleared by ATC. This was a total error on my part, I had an incorrect situational picture. On landing as a crew we debriefed our perception and failings w.r.t. the situation, then I phoned the watch manager and discussed the event, as I did with one of our Chief Pilots. CAA Closure: Investigation Findings: This incident was due to a loss of situational awareness and appropriate crew coordination in recognising the ATC service received, and therefore assumed clearances. This incident has been used internally to highlight the possible effects of misinterpreting ATC service provision.

201406671	24/05/2014	S92	APU start up whilst turnaround inspection was still being performed.	Whilst positioned on the l/h sponson carrying out the turnaround inspection (prior to FLT 87R) of the l/h engine exhaust area, the co-pilot started the APU (the APU exhaust outlet is located a few inches aft of the l/h engine exhaust). I immediately stepped down from the aircraft and went into the cabin to speak with the Pilot to ask why the APU had been started with myself still on the aircraft. The co-pilot informed me that the aircraft handler had given him the "OK" to start the Number 3 engine (APU). I then discussed this with the Aircraft handler. The APU start was carried out even though the turnaround inspection, in section 3 part 1 of the Tech Log, had not been signed off as completed. The Tech Log was still in the line office with engineering.
201406741	26/05/2014	S92	S92 descended from FL50 without ATC clearance. S92's height readout indicated passing 3700ft. Standard separation maintained.	I was on duty as the Rebros controller. S92 had told me that he would be doing an Airborne Radar Approach. I had on transfer from the previous sector asked him to report ready for descent. At 1159 whilst scanning the WAM I noticed that his height readout indicated that he had started a descent and was passing around 3,700ft. I challenged him stating that I did not remember him requesting descent. He then checked with me whether there was anything to affect descent. No other helicopter was affected by this descent. Supplementary 02/06/14: We were cruising at FL50 and preparing for a training ARA. The ARA Brief took longer than anticipated. We had received clearance to an offset waypoint with no traffic to effect, but I took that as our descent clearance. We did descent checks and commenced descent without clearance. ATC advised us at approx. 2700ft. There was no other traffic to affect. On return contacted ATC.
201407052	02/06/2014	S92	Altitude deviation. S92 descended below cleared 3000ft and observed indicating 2700ft.	At 1518 I observed S92 indicating 2700ft, I called the a/c confirming the QNH setting and advising that they were indicating 2700ft. The pilot confirmed that they were at 2700ft and the QNH, I instructed the a/c to climb back to the assigned level of 3000ft.

201407423	07/06/2014	S92	Altitude deviation. S92 cleared to 2000ft climbed through 2400ft due to an autopilot malfunction.	In receipt of a Basic Service from Brent Radar 122.25 climbing to 2000 on Cormorant 1017. During climb out, 3 cue coupled, IMC, double autopilot failure which degraded the AFCS to SAS only. The associated A/C pitch up attitude change caused the A/C to climb through 2400. As we were now (accidentally) VMC on top a request for continued climb to 3000 was made to Brent Radar. This was refused and 4000 offered and accepted. (preferred climbing rather than returning to 2000 cleared level because cloud tops were approx 2100 and A/C still SAS only mode). On return the health pages had recorded an AFCS 1 and AFCS 2 Att/Hdg Codes 4 and 032. The normal cause of this is caused by a heading mis compare. AFCS Pre-flight BIT carried out, AHRS 1 and AHRS 2 IBIT carried out. Visual inspection of the MSU's conducted, all checks showing no fault. Suspect magnetic errors built up whilst sat on the rig and when slaved was selected this created a Hdg mis compare indication which caused the AFCS degrade, System assessed as serviceable and aircraft returned to service.
201407798	14/06/2014	S92	Fire warning, engine nr2.	Whilst on task, FIRE ENG 2 aural alert and fire warning caption came on. Initial actions were carried out and an actual fire was not confirmed. Aural warning and caption went out after a few seconds but came on again repeatedly. Aircraft RTB and precautionary twin engine running landing.
201407998	17/06/2014	150	S92 at 1500ft received/complied with TCAS RA 'descend' with traffic to the West. Traffic info given.	Joining Inverurie lane with light Cessna positioning #2 to us TCAS TA triggered. Cessna was visual to the west; assessed as close but clear. TCAS RA 'descend' sounded. A/c descended i.a.w. the instruction and clear of conflict given. ATC had given updates on the relative position of both a/c and both a/c were visual with each other.

201408448	26/06/2014	S92	Unauthorised descent.	At time 1317 whilst I was operating as Hels controller S92 reported at Shrub. S92 was indicating Mode C of 1A and was under a DEC service inbound VFR. Incongruously, the strip still indicated the aircraft to be at 2A with no zone entry clearance having been issued or acknowledged. I questioned the pilot as to whether he had been issued a clearance and he replied yes. I then asked the WM to check the tapes as I believed he had descended without clearance. Supplementary 30/06/14: Enroute from E120 to Shrub at 2000 ft. we noticed 1 min. 30 sec. before Shrub that ATC hasn't called "clear to enter Shrub Balis at or above 1000 ft."I asked if PM had received a descent clearance and he presumed that he did. I then started descent and since I was uncertain about the clearance I asked PM to call descending to ATC. PM was under the impression that clearance was received and planned to call ATC in 1 min. when passing Shrub so he waited with the call. Call was made passing Shrub at 1200 ft. ATC asked if we had received a descend clearance and PM answered yes.After shut down in ABZ the supervisor from ABZ Radar called and informed me that they had listened to the tape and that no descent clearance had been given. The supervisor informed me that they had to submit a report even if there was no safety issue. I suggested I did the same and he agreed.Contributing factors :1) No call from ATC when approaching "shrub" 2) ATC had multiple call signs matching 86E (84E,86F,87E) and the radio was busy 3) Earlier clearance discussed between the crew, of 1000' due traffic on earlier flight while on deck E1204) Previous experience from earlier flight (PM) same route and point of departure (RIG) 5) Slight complacency due to VMC (nice weather conditions).
201408497	25/06/2014	S92	RH accessory module contact surface not effective.	R/H accessory module fitted to remedy an ongoing HUMS issue. During its first revenue flight it developed a 1+2 FADEC fault. After extensive fault finding and investigations, with the assistance of Sikorsky, the decision was made to change the R/H Accessory again. On inspection it appears that there is a fault with the surface on which the NR sensor mates with. This prevents the sensor from being in the correct position and preventing an effective NR signal from obtained.
201408534	27/06/2014	S92	S92 was observed at 1400ft instead of cleared 2000ft. S92 pilot made reference to an A/P issue.	I was acting as the Hels/Rebros controller - the two sectors bandboxed. S92 had been cruising at 2A, on an offshore traffic service. At 87 miles I observed that the height readout indicated 1,400ft. I called the helicopter who said they had noticed the height, and were climbing - due to an autopilot issue. No other aircraft was involved.

201408676	30/06/2014	S92	MGB screen filter incorrectly assembled.	No pressure indicated on initial start. A/c was shut down and possible leaks were inspected. The aircraft was brought into hangar where it was found that the MGB screen filter had been assembled incorrectly and the valve in the base of the screen assembly housing had been in the closed position, effectively shutting off any oil flow to the pumps. The screen filter was also damaged so the unit was replaced. On a ground run, nr2 accessory chip light illuminated, the chip detector was inspected and the debris was such that it was felt necessary to pull all the MGB detectors and filter. Both accessory module detectors had heavy contamination. Fleet support and manufacturer have been informed of the incident and we are awaiting feedback on subsequent maintenance actions. This item has been the subject of an ITS learning article and is listed in the AMM that it must be aligned correctly but the design is not fool proof. I believe this is not the first occurrence. An OEM decal stating that the screen assembly must be aligned with prominent arrows aligning the unit would help reduce misinterpretation.