

ADF Serials Telegraph News

News for those interested in Australian Military Aircraft History and Serials Volume 3: Issue2: Autumn 2013 Editor Gordon R Birkett

Message Starts: In this issue:

- News Briefs
- Story: Trashing the Trash and Grunt haulers, Part 1
- Curtiss Corner : Kittyhawk Mk Ia AL117
- Lockheed Corner: A16-181
- Odd Shots
- **Message Traffic Selections:** Please address any questions to: <u>question@adf-serials.com.au</u> in the meantime

Message Board – Current hot topics

These boards can be accessed at: www.adf-messageboard.com.au/invboard/

News Briefs



• Above pictured, the successful maiden flight of the Chinese built and designed 190 tonne **Yun-20 Jet Transport**, was carried out on 25/01/2013. The

AN70/II-76/C-17A hybrid will be developed to supplement and later replace IL-76s in PLAAF service.

- **PLAAF** is taking delivery of 5 ex Belarus II-76MD Candid Transports this year. **PLAAF** has also contracted for 28 Russian built II-76MD Candid's to be built as part of a 2005 Contract.
- First Indian C-17A, Line# F251, of an order for 10, has flown 11/01/2013.
- First AC-130J conversion from a MC-130J, type to be named the *Ghost Rider*, FY09-5710, is underway at Eglin AFB.
- **First Indonesian bound C-130H** will be **A97-006** which was the last QANTAS to undergo overhaul and repainting.
- First operational P-8A Poseidon for the USN's VP-16 "War Eagles" has flown in January 2013: Bu No 168430 LF-430



33rdFW Finger 4 Flight January 2013 USAF/LM

- The F-35 has been cleared for flight operations after a precautionary grounding when inspectors found a .6 in. blade crack on a 3rd-stage engine turbine 19/02/2013. The crack was found in AF-2, which has been used for testing the aircraft at the edge of its operational envelope. "The engine in question is part of the F-35 test aircraft fleet and had been operated for extended time in the high-temperature environment in its mission to expand the F-35 flight envelope," according to a statement from Lt. Cdr. Kyra Hawn, an F-35 spokeswoman. "Prolonged exposure to high levels of heat and other operational stressors on this specific engine were determined to be the cause of the crack."
- Officials at F-135 engine manufacturer Pratt & Whitney have indicated this was a one-off issue, not jeopardizing other engines in the fleet. No additional cracks were found in the fleet during post-grounding inspections.

- There are now as of January 2013, some 100 F-35s (51 F-35s are flying) have been built or are on the production line (41 F-35As in total), including the RAAF first F-35A (excluding USA firsts, 2 F-35Bs for the RAF (ZM-135/136) and one Dutch F-35A (F-001) have flown)
- The first operational F-35C Lightning II to be used in an USN Fleet Replacement Squadron (VF101 *Grim Reapers*) has been delivered, **Bu No** 168733 Nose # NJ-101, in January 2013.
- Further to F/A-18F Price details. Australia F/A-18E/F Super Hornet and EA-18G Growler Aircraft: WASHINGTON, February 28, 2013 - The Defense Security Cooperation Agency notified Congress Feb. 27 of a possible Foreign Military Sale to Australia for up to 12 F/A-18E/F Super Hornet aircraft and 12 EA-18G Growler aircraft and associated equipment, parts, training and logistical support for an estimated cost of \$3.7 billion. The Government of Australia has requested a possible sale of up to 12 F/A-18E/F Super Hornet aircraft, 12 EA-18G Growler aircraft, 54 F414-GE-402 engines (48 installed and 6 spares) 2 engine inlet devices, 35 AN/APG-79 Radar Systems, 70 AN/USO-140 Multifunctional Informational Distribution System Low Volume Terminals (MIDS-LVT) or RT-1957(C)/USQ-190(V) Joint Tactical Radio Systems, 40 AN/ALQ-214 Integrated Countermeasures Systems, 24 AN/ALR-67(V)3 Electronic Warfare Countermeasures Receiving Sets, 72 LAU-127 Guided Missile Launchers, 15 M61A2 Vulcan Cannons, 32 AN/AVS-9 Night Vision Goggles or Night Vision Cueing Device System, 40 AN/APX-111 Combined Interrogator Transponders, 80 AN/ARC-210/RT-1990A(C) Communication Systems, 100 Digital Management Devices with KG-60's, 36 Accurate Navigation Systems, 30 AN/AYK-29(V) Distributed Targeting Systems (DTS), 4 AN/PYQ-21 DTS Mission Planning Transit Cases, 24 AN/ASQ-228 Advance Targeting Forward Looking Infrared (ATFLIR) Pods, 40 AN/PYQ-10 Simple Key Loaders (SKL), 80 KIV-78 Mode 4/5 Module, 48 COMSEC Management Workstations (CMWS), 24 AN/ALE-47 Electronic Warfare Countermeasures Systems, 80 Joint Helmet Mounted Cueing Systems (JHMCS), and 400 AN/ALE-55 Fiber Optic Towed Decoys. Also included are system integration and testing, tools and test equipment, support equipment, spare and repair parts, publications and technical documents, personnel training and training equipment, aircraft ferry and refueling support, U.S. Government and contractor technical assistance, and other related elements of logistics and program support. The estimated cost is \$3.7 billion.
- KC-30 Tanker are now in initial service with four countries (RAAF (5), RSAF (6), RAF (14) and UAE (3).(India , France and Singapore expressing interest in ordering 6, 14 and 4 respectively)
- We have previously heard of the UK Government RAF divesting of ordered Typhoon Tranche 1 and 3 (232 Ordered, down to circa 160 or 142 balance) via Saudi and Omani Orders. It seems that the RAF will maintain in service more Tranche 1's with an eye of keeping 5 Squadrons worth of both types.. Germany had supplied 15 of their tranche 1s to Austria. <u>On the tranche1 balance sheet, Spain has approached Peru</u> for the supply and pricing of 20 second-hand ex Ejercito del Air Typhoon Tranche I's (Spanish Air Force ordered 84, then 72 in total).

Trashing the Trash and Grunt haulers, Part 1: GR Birkett@2013

The RAAF has had the responsibility to operate and service all large aircraft which could be employed for personnel and equipment transport and thus the selection of aircraft to suit those roles. Excluding the geographical requirements of overseas deployments, and with some 7.7 million square kilometres of territory alone, the RAAF was presented a considerable air transport problem that has existed since the end of the Second World War. Following the war, the transport capability was reduced to peacetime levels of about eighty aircraft.



Douglas C-47A-30-DL, A65-14, that entered RAAF service on 21/06/1943, pictured here at the School of Navigation in the late fifties and finally left in 1963, held in storage until 1967, then listed for disposal in 1969. GRB Collection

Being mainly focused on the necessity of providing strategic and tactical air logistics for outside theatres or peace keeping roles, in support of the Australian Defence Forces, and humanitarian roles, it wasn't until certain capabilities were obtained in the 50's and 60's that those role were realised. Those capabilities remained unchanged until the following turn of the twenty-first century.

In 1958, with a C-47 Fleet of just under seventy aircraft, the first of twelve C-130A Hercules arrived at Richmond RAAF base. These represented the first forays into strategic lift role, with these aircraft providing for the first time, a true long range transport capabilities. Slowly thereafter, the second post-war drawdown of C-47s commenced to bring the total of C-47s to forty aircraft.

With the selection of eighteen DHC4 Caribou in the early sixties to replace the C-47 on the tactical level, the days of the later were seemingly numbered.



A97-207 on the tarmac during the late fifties: Note Old Roundel under wing sans wing tank: RAAF Official



The RAAF's first UH-1B; A2-384 in October 1962 in original silver /white scheme: RAAF Official

Initially, eight UH-1Bs were ordered for SAR missions in the early 60's, but were further expanded in the trooping role with a purchase of a further eighteen to equip two squadrons. With the involvement of Australia in the Vietnam War, the C-47 numbers remained static, whilst another Squadron of twelve C-130Es were added, along with further deliveries of DHC4 Caribous and VIP aircraft.



RAAF Caribou A4-164 in the early seventies at Richmond: RAAF Official



C-130E A97-180 parked at Richmond early seventies sitting on the tarmac. RAAF official

The Helicopter Squadrons were further equipped with nine UH-1Ds, was followed by another eventual thirty four UH-1Hs by 1974. By 1975, there were three operational squadrons; 5, 9 and a composite 35Squadron (with Caribou) at Townsville, with numerous SAR flights around RAAF Bases.

A medium lift requirement from 1970 saw the delivery of twelve CH-47C Chinooks in 1973. Originally six were placed in storage with only six in the active fleet, though this would rise to eight in the 80's.



Hi Vis RAAF A15-007 in flight mid 1970's: RAAF Official

Post drawdown of Vietnam in the seventies saw numbers remain static for the next few decades with only the reduction of C-47s decline to about five with the ARDU in the late eighties. The twelve C-130As had been replaced one for one with twelve C-130Hs in the late seventies and attrition had reduced the DHC4 Caribous to just on twenty two airframes. An introduction of two ex QANTAS Boeing 707-338C aircraft was made in 1979 to further add an austere Strategic and VIP transport role.

During the late seventies, the search began to replace the DHC4 Caribou, but this project was respectively delayed thereon. During the early eighties, the RAAF was considering rid itself of the tactical transport role of the DHC Caribou and consolidate in an all C-130 Fleet.

The RAAF pointed to the savings in manpower, funds, and spares holdings by getting rid of the deemed then, an old aircraft. By adding to the C-130H numbers and perhaps obtaining further CH-47C medium lift helicopters, they could consolidate the aircraft types required.

Up to this period, the RAAF had to fund and operate all tactical aircraft; from the twenty-two Caribou, thirty-four UH-1Hs and twelve CH-47C helicopters. The Army was only operating light types from the fifty three Bell Jet Rangers produced, fourteen Turbo Porters and eleven GAF Nomads.

The RAAF felt in the mid eighties that they could provide a more effective strategic and tactical group by having four Boeing 707-338Cs, and replacing the C-130Es and Caribous with thirty two C-130H/H-30s. The later would include specialist aircraft types; two AEW Aircraft and between two and four Air to Air Refuelling, all to be operated in four role specific squadrons(35/36/37/38Sqn RAAF).



A65-95 in ARDU Service in the eighties: RAAF Official



C-130H A97-012 pictured early in the 1980's at Richmond NSW. RAAF Official.

If they did get all additional twenty C-130Hs, they would include eight being long fuselage C-130H-30s. They felt that this would effectively replace the Caribou role whilst streamlining types, whilst also reducing fuel usage. A counter argument by the then Department of Defence Services felt that the C-130Es could be brought up to C-130H standard in country, and that eight of those could be stretched 4.57 meters into C-130H-30 models for far less cost. The conversion of the remaining four C-130Es to the standard of a KC-130F specifications required only modification of leading edge, reinforcement to the outer front and rear beams of the wing and the inclusion of Refuelling pods with a removable fuselage tank of thirty-six hundred gallons placed in the fuselage.

They felt that the army would "rejoice" in the prospect of stretched C-130H-30s available and that there was KC-130Fs available to refuel their helicopters.

The simplistic response by the army was that they felt that no commander, be that Army or RAAF, would commit an expensive and heavy C-130H to the battlefront for the high risk of being lost for a small tactical load by a simple enemy held SAM or the odd angry shot.

The Army felt that a simple light transport was required and put forward, with a small RAAF support of the idea of obtaining Short Sherpa 330-200's, similar to those being introduced by the USAF in Europe as the C-23. There was talk of manufacturing some fifty of these aircraft under licence in Australia, both for local military use and for the civil market. The RAAF was leaning towards a bigger aircraft again, the CN-235, whilst still looking dreamingly at the Fiat G-222(forerunner of the C-27J) as the ultimate Caribou replacement, "if they had to". Further options of rebuilding and reengineering the Caribou with turbine engines came and went for the next two decades.

The project so far was a wash, and therefore placed on the backburner for another fifteen years until the life of type of the C-130E came up.

In the meantime, all tactical air force helicopters; the surviving thirty-two UH-1Hs and the fourteen new S-70A9 Blackhawks were transferred to the Army to operate in 1987, while the RAAF retained the twelve CH-47Cs due to their complexities.

A third batch of twenty-two S-70A9s to replace the UH-1Hs was cancelled after only the first two batches (fourteen and twenty-five) were approved, produced and completed in 1991. The UH-1Hs were expected to continue service into the next decade.

However a few years on, the versatile CH-47C was withdrawn from service as a cost saving measure in 1989 as the then government felt that the S-70A9 Blackhawk could provide the same capability for the a smaller hourly cost.

With the introduction of the F/A-18 into the RAAF service, a further three Boeing 707-368's were purchased (including one for spares reclamation) to the four Boeing 707-338C in service with 37 Squadron. The later four were converted to two point tankers in a reformed 33 Squadron. Sadly one of the new additions, A20-103, would be lost on a fatal training flight off Victoria soon after, leaving just four strategic transport and refuelling aircraft and one VIP/training aircraft in use.

The RAAF Transport Fleet numbered at this time; five B707s, twelve C-130Es, twelve C-130Hs and, from the early nineties, just fourteen DHC4 Caribous (having disbanded 35 Squadron and retiring seven Caribou for spares reclamation).



Final service year, 2008, a RAAF 33 Squadron B707-338C refuels two RAAF F/A-18As: RAAF Official

The post Cold War dividends that affected other air forces had little effect, other than on the Army Helicopter fleet program (losing Batch three of the Blackhawk program) and the RANFAA (losing in the early 80's, their fixed wing aircraft, but gaining sixteen S-70C Seahawks)).

An UN operation in Somalia in the early 1990's emphasized the requirements of both sea and air transport bridges from Australia to support an armoured reinforced battalion combat group in theatre. RAAF B707s and C-130s maintained that bridge until they withdrew.

With the fleet age of the twelve C-130Es coming to an end in the nineties, the RAAF again sought to rationalise its transport types and numbers by re-investigating an all Hercules fleet.

This time it centred on the C-130J model; a re-engineered, digitalised and updated Hercules, with options of nearly forty involved replacing both the C-130E and C-130H models, along with the Caribou. The savings by going to a three crew aircraft (two Pilots/Loadmaster) from a four to a five crew aircraft(two Pilots/Navigator/Engineer/Loadmaster) had enormous synergy savings in training, engine types/maintenance and operating hour costs against the current fleet mix of B-707s, C-130E/Hs and Caribou.

Again a four squadron structure would be used to operate a mixture of long and short fuselage versions used in transport, refuelling and airborne early warning roles. The breakdown considered was between eighteen and twenty-two C-130J-30s for transport and the remaining being standard

fuselage length models to fill the varied roles of providing special operations support (four), refuelling (four) and AEW(up to six).

Inclusive of the forty aircraft option, was to provide financial leverage with Lockheed to assist the RNZAF to replace their thirty year old five C-130Hs with up to six new C-130Js at the same time.

On 30 May 1991, the Defence Minister announced that four to six upgraded Chinooks would be obtained for the AAv. The "trade-in" deal of the eleven RAAF Chinooks went ahead, but with the expense of the modernisation of all, only four of the new D models could be afforded.

The 11 surviving aircraft were shipped back to the US in September 1993. Seven were sold to the US Army for \$40m, which went part of the way toward funding the upgrade, however, there were the added expenses of spares, training and support equipment. Later they would add another two newly manufactured CH-47Ds to make a total of six in use.

By this time in the nineties, the Army was bedding down the rotary fleet and had re-introduced the CH-47 Chinook, in its new Delta form, with four remanufactured ex RAAF CH-47Cs, along with thirtynine new S-70A9 Blackhawks.During the same period, the UH-1H fleet soldiered on, now numbering twenty-eight aircraft as four were gifted to the PNGDF in the early nineties.

The RAAF, anticipating difficulty in its new thirty two aircraft C-130J/J-30 program, confirmed the order for only twelve C-130J-30 aircraft to replace only the C-130Es of 37 Squadron and authorised the refurbishment of its twelve 36 Squadron C-130H Fleet to ensure its thirty year life span to 2008.

Separate Air Projects to supply separate AEW and Refuelling aircraft were commenced which would, in time, result in the five A330-MRTTs (now designated KC-30A) and six B737-700 Wedgetail (now designated as the E-7A Wedgetail in 2012)

Thus at the beginning of the twenty-first century, the RAAF Transport Group still evolved around basically the same force structure it had since the sixties, albeit devoid of helicopters, with twenty-four C-130H/C-130J-30s and fourteen Caribou in operational service. The increase capabilities of the longer fuselage C-130J-30s was acknowledged, along with the decrease in personnel to fly it, but no additional airframes had been ordered.

However for the first part of its service, being a fully new aircraft by all accounts, the RAAF faced numerous engineering and software issues that had to be overcome over the next few years. (In fact these changes are still being introduced in 2012 with Software updates to Version 8 being implemented. Being at times the Fleet leader and early customer, we would be the first to experience such problems, as borne out in B737 AEW, KC-30A, Sea Sprite, ARH and MRH-90 Programs to name a few!)

During the 1999 Timor Crisis, all three transport types, including the remaining C-130Es that were still operational, were used in the air bridge from Darwin to place and supply Australian Defence Personnel on the island and sustain them for the next few months, along with the Navy. It was the first Australian led combined arms *insert* operation since Borneo in 1945 where we offensively placed our own troops on the ground in what was seemingly a hostile opposed environment, using mainly the resources of the ADF alone. The air bridge included the self-ferrying of the Army's Blackhawks from Darwin to Timor. Again, the niche use of the Caribou was highlighted. Post

operational reviews lead to many ADF improvements and response levels that would later result in doctrine change. The Army would add another two newly manufactured CH-47Ds to make a total of six in use by 2002.

As we know it now, the 11th September 2001 came with destruction of the World Trade Centre and the start of a war on terror that continues to this very day. We lost Australians that day and would again loose even more Australians the following year with the Bali bombings. The Australian Defence Force was at war again, and this time. It would start in Afghanistan and later Iraq, and then back into Afghanistan. Limited initially to niche forces we could supply quickly (SASR, 75Sqn RAAF F-18s, AP-3Cs, C-130s and B707 tankers).

This led to the RAAF relying on the C-130H Fleet even more to absorb the transport requirement and tasks while these "new aircraft problems" were overcome. Aircraft upgrades to provide adequate protection against ballistic, SAMs and other threats, were carried out on the whole C-130H fleet.

Earlier ambitious programs of providing an Australian designed Electronic Warfare equipment fit into RAAF and Army Aircraft was started in the 90's. Project Echidna, in its Phase 1 ALR2000/2 forms, was to provide this protection for all ADF Aircraft, from the F-111C, down to S-70A9.

This was a dismal failure and seemingly a waste of tax payer's funds. Off the shelf equipment was purchased and adapted for the C-130H and CH-47D and later planned for the C-130J-30s by 2012. The only apparent installation derived of this project is being made on twelve designated S-70A9s of 6 AAv Regiment at this moment; some fifteen years later of project go ahead.

In late 2003 'A' Squadron Blackhawks of the 5th AAv Regiment and the UH-1 equipped 171st Squadron (then 1st AAv Regiment, later 6 AAv Regiment) swapped designations, with the former 'A' Squadron becoming an independent squadron supporting Special Operations Command (Australia) based in Holsworthy Army barracks near Sydney. **Part 2 will follow...**



Low and fast in Sydney City CBD in 2011 is a 171 Sqn Blackhawk A25-225. ADF Official



Curtiss Wright Kittyhawk Mk1A; Model H-87A-2, CW#448 c/n18762: AL117 OK-G of 450Sqn (RAAF) One of 131 RAF Direct Purchase Kittyhawk Mk1A per Serial batch AL100 to AL230.

Profile is an Indication only

Whilst escorting at 4000 feet on a WNW heading, five Boston Bombers who were attacking enemy motor transport convoys of the *German 90th Light Division, Afrika Korps* near El Adem, the six aircraft escort sighted twelve JU88 enemy bombers at 5000 feet escorted by ten BF-109s, flying another 500 feet higher and attacked those bombers.

Immediately the German escort dived on the attacking Kittyhawks which caused the flight to break contact.

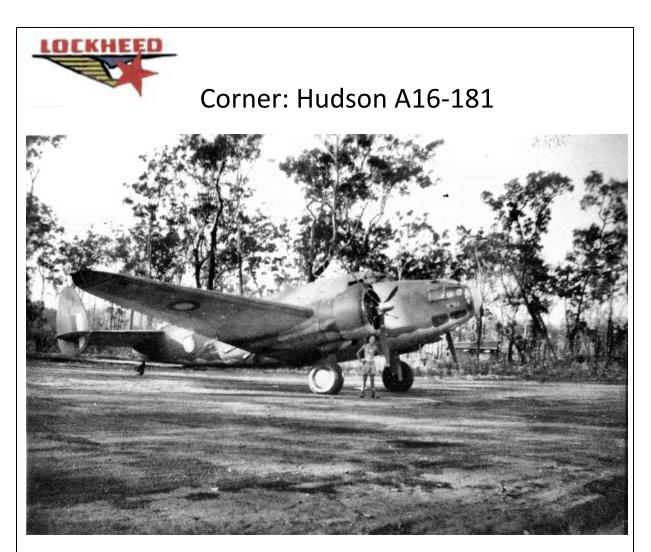
One of the flight's Kittyhawk was seen burning on the ground following the interception. A further Kittyhawk, **AK958**, flown by Sgt R Stone RAF Service #258632 was also missing.

A parachute was seen some five miles north of El Adem. The third missing forced landing near the front lines, **AL106**, piloted by P/O John Carlisle Osborne RAAF Service Number 403369 who returned to the unit later that day.

On returning to base, one of the survivors of that mission, Sgt McFarlane in AK722, was attacked by a lone Hurricane over the base by accident.

The pilot of OK-G AL117; Sgt William John HALLIDAY, RAAF Service Number 406244; was posted missing.

As late of 1948, his remains were still missing and/or unidentified from those exhumed.



A16-181 at Hughes Strip early 1943. GRB Collection

A16-181 C/N 6353 USAAF FY#41-23536 RAF#BW674

<u>BPC RAAF Purchasing Indent 911</u>: Rec USAAF as RA-29 28/12/41.Defence Aid consigned ex USAAF 22/01/42. Rec 1AD 23/03/42. Issued 2Sqn RAAF 20/04/42. Damaged during reconnaissance flight with two other Hudson's in company, when within five miles of Penfoei, the pilot sighted a large 3000-4000ton vessel tied up at the Koepang wharf. Two Zero fighters approached A16-181 and attacked. After one feint attack another Hudson, another approached and was met by return fire, causing it, with smoke emitting, to bank sharply.

The Japanese Pilot bailed out and the aircraft crashed in flames into the sea. The WAG who shot it down on his second burst was Sgt Webster (Belly Gunner). With the other Zero holding off, the pilot of A16-181 found cloud cover and returned to base. Crew included: F/O Hays, P/O Carter, and Sgt Webster and two others not injured. Aircraft sustained some damage. Rec 5AD ex 2Sqn RAAF 20/07/42. Rec 2 Sqn RAAF 08/08/42. Issue 1 RSU 12/11/42.

Rec 2 Sqn RAAF 07/12/42. Rec 1RSU 13/01/43. Rec 2 Sqn RAAF 04/02/43. Accident happened on the 16/03/43 as the main undercarriage collapsed on take-off on a stores supply mission from Hughes Strip to Millingimbi. Crew: P/O T J Newham Serv#400818 and S/Ldr S Austin (OC 2Sqn RAAF) un-injured. Rec 1RSU 08/04/43. Rec 2 Sqn RAAF 25/04/43. Issued 1 RSU 27/04/43 for further repairs.

Rec 2 Sqn RAAF 08/05/43. Issued 4RSU 19/05/43. Rec 2Sqn RAAF 29/05/43. Rec 4RSU 21/06/43. Rec 2 Sqn RAAF 03/07/43.

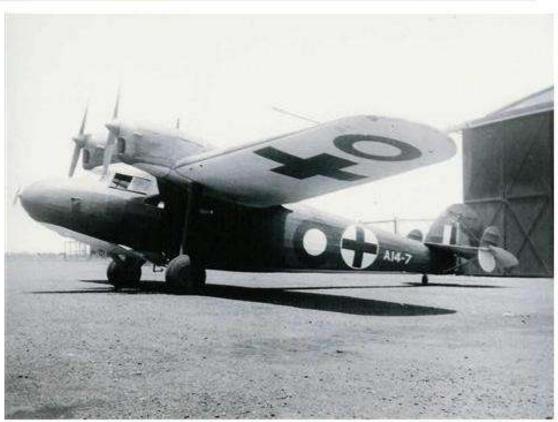
Operational lost on the 15/08/43 whilst on Mission HUG.32 when accompany A16-233 in carrying out a search for shipping near Keaukwa. Two enemy Zeros intercepted A16-233 after it released bombs at 6500ft over target ship.

After evasion of the two Zero fighters A16-233 flew back to Australia on the deck. No further sight was made of A16-181. It was deemed as missing on ops as a result of enemy action 15/08/43.

Crew: Sgt Lamb Serv#416778, Sgt Ikin Serv#408151 (NavB), Sgt N McLean Serv#416771 (WAG) and Sgt M Jackson Serv#418033, all missing, presumed killed.

AMSE Approval to write off per Casualty File#9/16/1002 Min#5 on 24/08/43.

Odd Shots:



A14-7 in fresh Ambulance Markings and paint, possibly November 1943 when with 3AD (Amberley's No 4 Hanger in background)



Not all PB2 Cats went Black! A24-367 NR-E of 113ASR Flight is still in RAF Coastal Command Colours. GRB Collection



Martin Mariner #10, but what was the A70 Serial? Perhaps it is A70-11 "Sweet Mystery"? In Cairns during 1944. GRBCollection

Next Issue, the winter 2013 edition, will be out circa late June 2013.