HARRINGTON AVIATION MUSEUMS

THE DROPZONE

VOLUME 2, ISSUE 3

OCTOBER 2004

Editorial Note

Welcome to the third and final edition of 'The Dropzone' of 2004. It has been a sad year for many of us with the passing of some of our dear friends who had helped, in no small way, to make the museum what it is today. I refer, of course to Bernard our benefactor and to Colin and, more recently, to Barbara Reeves, our Secretary.

At the time of writing an Extraordinary General Meeting of the Society has been called in order to appoint a new Secretary. This is scheduled to take place at 5 p.m. on Sunday 31st October immediately after the museum closes to the public for the last time this year. Weekend opening is due to re-commence next Easter. With a positive attitude prevailing, we look forward to a bright future, just as, I am sure, the three missing members would have wished.

Up to the present we seem to have had little or no feedback from members regarding their thoughts on this newsletter 'The Dropzone' - do you like or dislike it in its present form? Is it worth the time, expense etc. that goes into producing it? Do you read it? Do you want it to continue? These are all questions that we would like you, as members to answer. Please let us have your views whether good or bad. We need to know whether you consider it to be a worthwhile project.

Finally, on a happier note, this year's Christmas party, as in the two previous years, is due to be held at the Market Harborough Golf Club on Monday 6th December at 7 p.m. Thanks again to Vera for organising this popular event for us all.

Do you know where the Red Lion Hotel is or was and what it looks like now?

We would like to find out as it was visited and photographed by some of the ground crew from Harrington during WW2.

YOUR MUSEUM NEEDS YOU

The Museums at Harrington close on the 31st October 2004 and are scheduled to reopen on the weekend before Easter, ie March 19th 2005.

However whilst the museums are closed to the public over the winter months there is plenty still to do. In addition to us needing to upgrade the toilets etc to include wheelchair usable facilities in accordance with the requirements of the Disability Discrimination Act we also need to carry out building maintenance, including redecoration, roof repairs, floor and case cleaning etc.

Some of the displays and exhibits also need cleaning and upgrading.

We would still like to see members lending a hand at the museum with all those odd jobs that need doing over the winter months so that next year we can impress our visitors even more than in previous years

Should you have any other suggestions on how we can encourage active members and visitors to the museum then please discuss your ideas with members of the committee

SPECIAL POINTS OF INTEREST:

- *Barbara Reeves Obituary*
- *The Story of the DC-3 and its origins by John Harding*
- *A WW2, behind the lines, experience by James Darby*
- *Graham West takes a look at the Sten Gun, considered by some as a plumbers nightmare*
- *Follow that Star, a wartime experience by Harold Watson*

Barbara Reeves 27th June 1947 - 10th September 2004

Several members of the Harrington Aviation Museum Society and the Northants Aviation Society joined Barbara's friends and relatives at a Thanksgiving and Memorial Service to her life at the Doddridge Castle Hill Church in Northampton on the 20th September.

The suddenness of her passing following a relatively short illness, which had come upon her over the summer months, came as a tremendous shock to us all. The Rev. Malcolm Deacon, who had also been her friend for many years, led the services

Barbara was elected as the Secretary to the Harrington Aviation Museum Society at the Annual General Meeting in February 2004 following the death of Bernard Tebbutt. She had been an active committee member of the Society since its formation in 1994. She and her Husband Tom were also the backbone of the Northants Aviation Society having held the posts of Secretary and Treasurer respectively of that Charity for many years. Barbara also organised the annual classic car picnics that had been a regular event at the museums over recent years

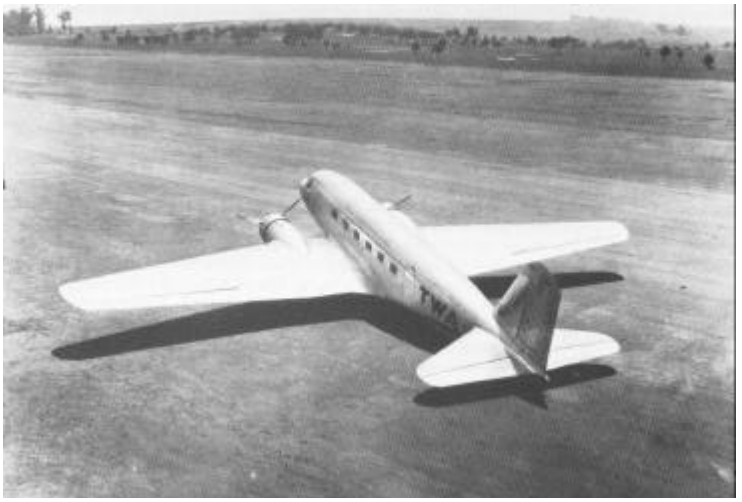
Barbara filled her life with many interests and activities. In addition to her involvement with the Harrington museums she had been a Beaver leader with the local scouts for 25 years. She was an avid lace maker and many members might recall the museum logo'd lace bobbins and lace bookmarks that she produced to help raise funds. She was also very knowledgeable on local and family history and was a squirrel like collector of all kinds of things. She will be very sorely missed by all that knew her.

We express our heartfelt condolences to her husband Tom, to her sons Simon and Jason, and to her mum, Nan, and all of her family

THE STORY OF THE DC-3 AND ITS ORIGINS
by John Harding

With four of these aircraft undertaking hazardous missions from Harrington in 1944 and '45, I thought that it might be relevant to look into the development and use of this wonderful transport which began with the DC-1 back in 1933 (more than 70 years ago). Today in 2004, a comparatively large number remain flying worldwide, probably in the region of two hundred or more.

The original Douglas design proposal to TWA (Trans World Airlines) was for a huge aircraft (for its time) with two Wright Cyclone engines, these being radial, air cooled, nine cylinder and developing 710 h.p. Inside were two rows of six seats, a small galley and a lavatory at the rear. Charles A. Lindbergh was there as technical advisor.... Lindbergh recommended the project but with one guarantee: the aircraft should be able to take off with a full load from any point on the TWA network within the USA on one engine! The aircraft was pushed out of its hangar on June 22nd 1933 and the first flight took place on the 1st July. This first time in the air



The DC - 1 flew for first time on 1st July 1933

was not without its anxious moments, at one time both engines cut out when it was climbing but the test pilot quickly worked out that raising the nose caused fuel starvation. A forced landing followed and it was found that the new carburetors were faulty. This was quickly fixed and on September 4th, 1933 the aircraft passed the 'Lindbergh Test' by taking off from Winslow, Arizona at an altitude of 4,500 ft, fully loaded and climbing out on one engine. The half-powered plane reached an altitude of 8,000 ft and continued flying on one engine to Albuquerque in New Mexico, some 240 miles away.

In 1936 it was sold to millionaire Howard Hughes who later sold it to Viscount Forbes in England and from there it was to move to France and then on to Spanish ownership where it ended its days in a forced landing in December 1940. This was the only DC-1 to be produced (Note that DC stands for Douglas Commercial).

The DC-1 was quickly followed by the DC-2, which was an improved version with a 2 ft longer cabin to allow an extra row of seats and an extra 790 Kg of freight. The first DC-2 flew on the 11th May, 1934 and by the following month 72 were on order and the first military versions were supplied to the US Navy. In 1936 the Army Air Corps received the first of eleven which were designated the C-33 and C-34 (C=Cargo). Many civil air routes were expanded by the DC-2 but the war put an end to its commercial use in many parts of the world. It continued in military use, however, and some even found their way into the RAF in the Middle East. A small number survived the war and today one example is flying in Europe, this belonging to the Netherlands. KLM (Royal Dutch Airlines) were, in fact, one of the first operators of the type.

The first flight of the new DST (Douglas Sleeper Transport) took place on the 17th December 1935 and this was the beginning of the DC-3. Trans-Continental services began on the 18th September 1936 taking 17 hours 45 minutes from East coast to West coast which was revolutionary for its day. By the end of 1936 31 DSTs and DC-3s had been delivered. At the time of Pearl Harbour in December 1941 US Airlines had 289 in service. Meanwhile work on the military version of the DC-3 was progressing, this version was designated the C47 and was ordered by the then USAAC. (US Army Air Corps) which later became the USAAF (the US Army Air Force). It is worth noting that the USAF (US Air Force) did not come into existence until 1947. This new military version had double cargo doors on the left-hand side, a strengthened floor to take heavy loads and a utility interior devoid of soundproofing. The first C47 (or Skytrain as it was officially called in the USAAF) came off the production lines in January 1942. With widened and lengthened fuselage and more powerful engines (Pratt and Whitney Twin Wasps) each of 1,200 h.p. the maximum speed was raised to 230 mph at 8,000 ft. A typical load in the military variant might

Harrington Carpetbagger C-47 landed in a French field

A United States Army Air Corps C-34 with standard DC-2 tail . Only 2 of this mark were produced and purchased for use by the US Army Secretary and staff

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be eight troops with arms, a field gun plus a jeep.

Passenger seating was 12 in the DC-1, 14 in the DC-2, 14 berths in the DST and initially 21 in the DC-3 although this was later increased to around 32 with the more powerful engines.

During the war, C-47s, Gooney Birds as they were affectionately known by most American flyers, or Dakotas as they were called in the RAF, served in every battle zone and were the mainstay of the transport wings of both the RAF and the USAAF. When production ceased in the summer of 1945 a total of 10,296 had been built including 10,123 as military transports under the USAAF. designations C47 and C53. Over 1,900 Dakotas were supplied to the RAF under lend-lease from March 1943 until the end of the war. They were active on all fronts as glider tugs, freighters and ambulances, paratroop carriers and personnel transports and later they played an important part in the Berlin Airlift of 1948-49, many being used by the USAF. and the RAF. who, in fact, flew nine squadrons on this operation with Transport Command. The RAF's last Dakota was retired on the 1st April, 1970 and is now preserved at the RAF Aerospace Museum at Cosford. (Note that one Dakota is at present serving with the Battle of Britain Memorial Flight based at. Coningsby in Lincolnshire - this serves as their support aircraft).

After the war many C47s and C53s were declared surplus and were used as civil airliners as well as military transports with many nations.

At nearby Coventry Airport, two examples of ex-RAF Dakotas are currently airworthy with plans to restore two more in 2005, one as a passenger aircraft which will be used to take parties to air shows etc. and the other to be used as a flying classroom for parachutists. The four examples still to be seen at Coventry are C47 models which served in the RAF, at least two of them actually taking part in the Berlin Airlift. Hours flown to date on each aircraft are between 30,000 and 44,000 - quite an achievement in longevity.

It is interesting to note that in addition to US production of the type, it was also produced in the Soviet Union as the Li-2 and over 2,000 were made. Japan also produced over 400 examples during the war (how did they get the plans?) but almost all of these were destroyed by the Allies.

C-47 at Harrington Airfield Station 179

Main Specifications of the C-47 were:

Manufacturer:	Douglas Aircraft Co. Inc., Santa Monica, California.
Power Plant:	Two 1,200 h.p. Pratt and Whitney Twin Wasp R-1830 radials.
Dimensions:	Span 95 ft., length 64 ft 6 ins.
Weights:	Empty 16,865 lb. Loaded 27,940 lb.
Performance:	Maximum speed 230 m.p.h. at 8,500 ft . Cruising 160 m.p.h.
Range:	1,500 miles

BEHIND THE LINES by James Darby

Having written about the C-47 and its earlier versions, I thought that a story previously published in the 'Carpetbagger' from one of the Harrington veterans might be appropriate and it is reprinted below.

My first C-47 flight to land behind the German lines in France was with Colonel Clifford Heflin as my pilot. I will always remember how relaxed he was. On the other hand, I was scared to death. I later flew on three of these missions where I was the pilot in command who landed behind the lines. I will vouch for the fact that the 'Maquis" underground forces were not the greatest experts at selecting landing areas for C-47s, especially when the runway was outlined by just a few flashlights.

On one occasion we sent a C-47 nighttime landing mission into the Rennes area of France. I don't recollect the pilot's name, but the airplane landed up in a ditch that was parallel to the very narrow landing area. One prop was damaged and all hydraulic fluid was lost for the brakes, gear, flaps etc. (flaps nay have been electrical - I can't remember for sure).

At the time of this event I was the Group Operations Officer. Tommy King was the 857th Maintenance Officer. Tommy convinced me that he and a hydraulic specialist under the guidance of Line Chief Master Sergeant Miller, could repair the airplane sufficiently for a one time flight. Since the area where the damaged plane landed was fairly secure, Colonel Fish concurred and we flew the maintenance team into the field where the damaged plane was located.

When Tommy King gave us the word that the repaired airplane was ready to fly, Colonel Fish designated me to take another C-47 into the same field with a crew to fly the damaged plane back to England. Captain Bill McKinley flew as my navigator. I do not remember who the rest of the crew were.

On landing in France we were met by a delegation from the French Underground forces. With great fanfare, much to our consternation, we were driven into a nearby town to a lobby where there was much toasting with various wines. Then we were very secretly taken to a cellar for some food and more toasting.

Bill McKinley disappeared from our group. When the time arrived for us to return to England that night he was nowhere around. After waiting an inordinate length of time for him I took off and returned to England without him. After some apparently wonderful adventures Bill returned to England on another flight several days later.

THE STEN GUN by Graham West

In early 1941, a prototype was put forth by the Royal Small Arms Factory in England, inspired by captured German MP40s. According to Colonel R.V. Shepherd OBE it was named the **STEN** by using the initials of its designers, Major Reginald Vernon **S**hepherd and his Senior Draughtsman Mr Harold John **T**urpin, and adding them to the first two letters of **EN**gland and not as often thought ENfield, the location of a small arms factory and arsenal .

The Sten Gun was first used at Dieppe by Canadian troops. It completely replaced the more expensive Thompson in Northwest Europe by the time of the Normandy landings in June 1944.

The Mark I Sten, which featured a flash hider, wooden furniture, and folding hand grip, was quickly replaced by the Sten Mark II, which saw widespread issue. Two million examples of this Mark were produced. The Sten was a very simply built weapon, manufactured from just 47 parts, mainly stamped from steel and welded, sweated, pressed or riveted together. The only machined parts were the bolt and barrel.

The Sten's compact size, simplicity of manufacture, and ease of dismantling (and hiding) made it a favourite among Resistance groups on the Continent. As well, it could use captured German 9mm ammunition. In fact, the 32 rd magazine was a very close copy of the MP40 magazine, which unfortunately meant that like the German version, it was prone to jamming. The Sten Mark II could even be fitted with a silencer, becoming the very first silenced SMG. Large numbers of the silenced version were made.

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The Sten Mark III was an even simpler version introduced by Lines Brothers, a firm of toy makers, and was issued out by the time of the Normandy landings. While possibly the best version of the Sten, it was not produced in large numbers. Its main feature was a fixed barrel and all-in-one body and casing.

The Sten Mark V was introduced for airborne troops, though no real improvements were made. Cosmetically, a wooden butt, a pistol grip, and a fore grip were added, along with a bayonet lug (to accept the spike bayonet of the No. 4 rifle).

The Sten was issued to vehicle crews, despatch riders, and those who had no need for a long range weapon. In the main, however, it was issued to infantry battalions, especially platoon commanders, platoon sergeants, and section leaders in infantry platoons.

The first combat use of the Sten occurred at Dieppe. In the weeks prior to the raid, Canadian soldiers found that many parts had to be filed, adjusted, and tested in order for the Stens to work properly. A lot of time was spent getting their new weapons battle-worthy. When the raid was cancelled in July, the Sten Guns were withdrawn. A day before the remounting of the raid, brand new Sten Guns, crated and packed in grease, were issued out to some very disgusted soldiers.

The Sten Gun was not popular among troops, who called it the "Plumber's Nightmare" or "Plumber's Abortion" (in reference to its' ungainly appearance and resemblance to a piece of tubing). In addition to jamming, it was also very prone to accidentally discharging, especially if dropped. Many Canadians were wounded or even killed by Sten Guns even before being committed to battle.

The guns were again issued for the Korean War, but were again not well liked and often replaced with American weapons where possible. The gun remained in service until replaced with the Stirling submachine gun, which was similar in many respects.

Sten Mk 2
photo credit www.stengun.dk

Sten Mk 3
photo credit www.stengun.dk

Sten Mk 5
photo credit www.stengun.dk

Mk 2 Sten showing the two types of shoulder stock, bayonet, sling and magazine loading tool

Silenced Sten Mk 2S
photo credit www.stengun.dk

Sten Mk 1
photo credit www.stengun.dk

FOLLOW THAT STAR by Harold Watson

Harold is a member of the Harrington Aviation Museum Society who lives in Lowestoft and during the war flew with 161 Squadron from RAF Tempsford

Owing to bad weather during December 1944, the two Special Duty Squadrons, 161 and 138, based at RAF Tempsford were unable to carry out many operations. Because of the advance of the Allied Armies through France and Belgium the SOE operations were now mainly concentrated on Holland, Denmark and Norway, and adverse weather over these three Countries during this month, caused the crews, on many occasions, to be briefed and then stood down from operations. Fog was also causing problems over Tempsford and it was necessary on one or two occasions to use the Fido facilities at the nearby Pathfinder Unit.

As the month progressed so did the weather deteriorate, and it was not long before rumour began to circulate among the crews that the Station was going to stand down and that Christmas Leave was on the cards. This rumour however was soon scotched and all crews were informed that they would remain on Station in case there was a break in the weather. Plans were therefore being arranged by the crews for parties in the Officers and Sergeants Mess on Christmas Eve and Christmas Day.

Towards the end of the month the Germans mounted a breakthrough in the Ardennes and were striking for the Belgian Coast. The weather continued to deteriorate with snow now falling over the Ardennes, and air operations were proving difficult over that area. On the evening of the 23rd December, there was a slight break in the weather and 4 aircraft from 138 and 2 from 161 Squadrons were sent on a spoof raid over the German advanced headquarters at the rear of the Ardennes salient. This entailed dropping dummy parachutists in the area to simulate an airborne landing. Very little opposition was met with but the weather over England closed in very rapidly and the aircraft were unable to return to Tempsford, all being diverted to Tangmere.

The morning of the 24th December dawned fine and clear and it was possible to air test all available Stirlings, but the weather did not last and by late morning the fog once more had blanketed the airfield. The arrangements for that night's parties were now put into full swing, then rumours came in that the bowsers were filling up the aircraft, and this was followed by a call for all crews to report to the Squadron briefing room. It was important that a further spoof raid is made on the German advance headquarters, there was break in the weather forecasted for that night and all available crews were to be operational. Bomber Command aircraft would be carrying out a raid on the Rhur and would be flying at high altitude but the Special Duty aircraft would go in at low level on the German side of the Ardennes Salient. The Tempsford aircraft would plot their own course but it was imperative that they stayed away from the bomber stream. It was expected that there would be heavy German fighter activity in the area.

Our crew was allocated area 2 and Stirling Mark 4 aircraft, MA-Zebra. Take off was in thin fog, which on crossing the North Sea, changed into heavy snow showers. As we approached our target area at low level, Bomber Command could be seen very clearly attacking the Rhur, with the sky being lit by bomb flashes, anti aircraft fire and target indicators. An uneventful run into the target area was made but after releasing the spoof parachutists, the aircraft came under machine gun and light anti aircraft fire. A check was made of the aircraft but no damage could be found.

On leaving the target area the aircraft climbed to 3000 feet and a course was set for Tempsford. A short time later a call was received from the rear gunner, "Skipper, we have a follower. I cannot see what it is and it is out of range, but there is something there". We dropped to 2000 feet and did a 'Dog Leg' but the gunner reported that he was still with us and had followed us down. Heavy snow showers were then being encountered, and it was decided to go down even lower to make an attack from above and astern dangerous. Again the gunner called "He's still with us, but not in range" A radio message was then received from Group that Tempsford was now fogbound and that all Tempsford aircraft were to divert to Lyneham.

An alteration of course was made for Lyneham and a fur-

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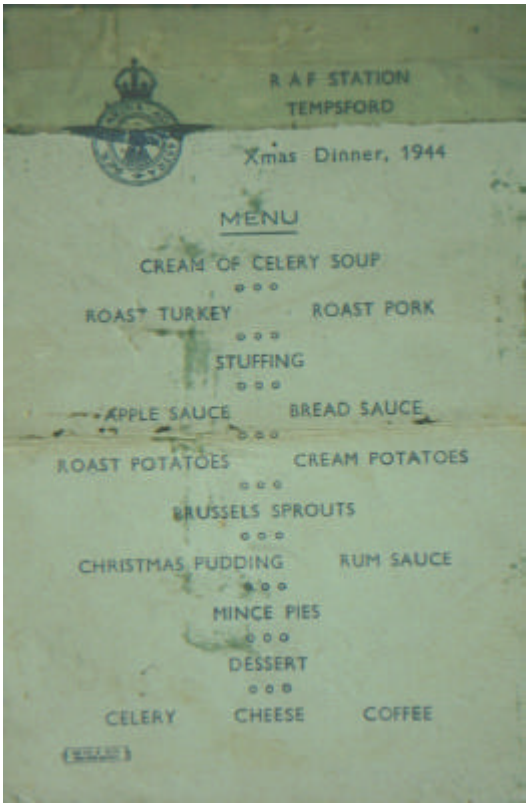
Contributions to the newsletter are greatly appreciated, please send them to John Harding at the Carpetbagger Aviation Museum, Harrington NN6 9PF

Wer'e on the Web!
www.
harringtonmuseum.
org.uk

Is there any special subject or topic that you would like to see in the newsletter? If so then let us know and we will try to incorporate it in future editions

ther 'dog leg' was carried out but still our shadow remained. By this time the English Channel had been nearly crossed and on approaching the coast, it was decided to inform Group that it was thought that a 'bandit' was following us. The wireless operator had just begun his transmission when a further shout was received from the rear gunner – " I can see him Skipper. It's definitely twin engine and coming closer – hang on it's a b…….. Lanc!"

We landed safely on a snow-covered runway at Lyneham followed in by our 'trusty shadow'. Later it was revealed that our Lanc was a new crew on their first operation who had become totally lost in the bad weather and had lost all radio contact. Their Flight Commander had told them that if they got lost they were to follow any aircraft they found. They had seen a light ahead and discussed whether it was a star or a light. After deciding that it was a light from an aircraft they decided to follow it, but were totally perplexed by our actions. On examination of our aircraft we found that part of the exhaust baffle on our port outer engine had been shot off causing the exhaust to be seen from the rear. A lucky escape for both of us?


R A F STATION
TEMPSFORD

Xmas Dinner, 1944

MENU

CREAM OF CELERY SOUP

ROAST TURKEY ROAST PORK

STUFFING

APPLE SAUCE BREAD SAUCE

ROAST POTATOES CREAM POTATOES

BRUSSELS SPROUTS

CHRISTMAS PUDDING RUM SAUCE

MINCE PIES

DESSERT

CELERY CHEESE COFFEE

Regretfully the festive parties did not take place, as owing to the bad weather the aircraft were grounded at Tangmere and Lyneham until the 28th December. On the night of the 31st December, all crews were engaged on Special Operations over Denmark and Norway.

Harold Watson's Stirling crew