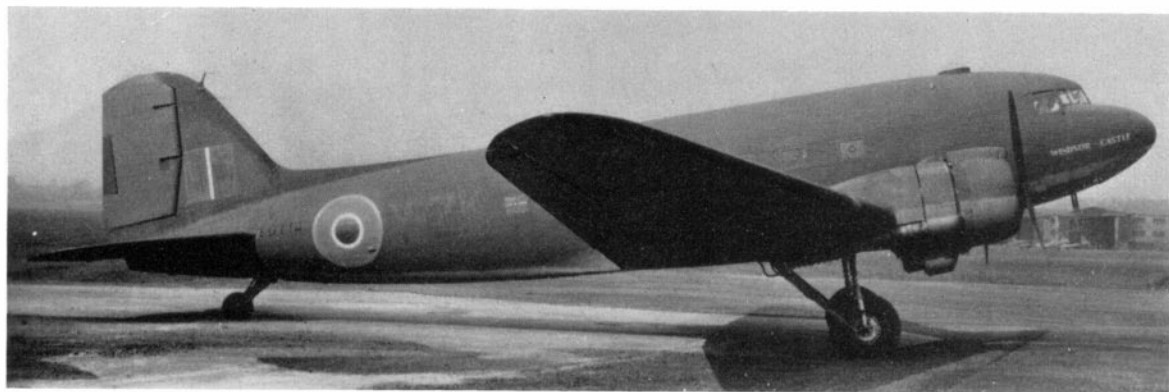


# PROFILE

# 220

## DOUGLAS DAKOTA MK I-IV





Photographed at Hendon in March 1943, Dakota Mk. I (R.A.F. serial FD772) C-47-DL 42-5639 c/n. 6227 was coded ZK-Y of the resident No. 24 Squadron and was named Windsor Castle. This was the fifth Dakota to be delivered to the R.A.F.

(Photo: Imperial War Museum H.1968)

# Douglas Dakota Mk I-IV

by Arthur Percy Jr ARaES

WHEN Dakota C.4 KN645 landed at R.A.F. Kemble on April 4, 1970 with Squadron Leader Neil Franks at the controls, there ended a phase in the career of a unique transport aircraft which had faithfully served the R.A.F. for more than a quarter of a century. Placed in temporary storage with 5 MU (Maintenance Unit), KN645 will eventually be placed in the R.A.F. Museum (at London's historic Hendon Aerodrome) alongside other veterans, few of which can claim such a varied career as that of the "Dak".

By far the most celebrated of all transport aircraft, the Dakota remained in wide service with the R.A.F. until 1949-50, when it was replaced by the Vickers-Armstrongs Valetta. During World War II, Dakotas served in every theatre of operations as glider-tugs, paratroop carriers, personnel transports, freighters and ambulances—they were the mainstay of both R.A.F. and U.S.A.A.F. transport squadrons.

Developed as a military transport from the Douglas DC-3 commercial airliner (*Profile* No. 96) which first flew in December 1935, the Dakota entered U.S. Army Air Force service as the C-53 Skytrooper in October 1941, followed by the C-47 Skytrain in January 1942. The C-53 was similar to the C-47 but had no facilities for carrying freight. Nearly 2,000 models of this military variant of the world-famous DC-3 were delivered to the R.A.F. under Lend-lease agreement.

## EARLY MODELS

The R.A.F. already had experience with the earlier Douglas DC-2 and DC-3 models which the British Purchasing Commission in Washington bought during 1941; these were surplus to U.S. airline requirements and first saw action when Rashid Ali started his rebellion in Iraq during April of that year. Other DC-3s were impressed from Pan American Airways who were operating the type in the Middle East and both these models flew throughout the war in the

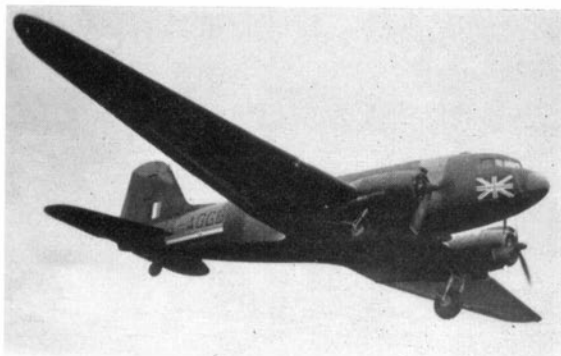
Middle East, India and Burma, serving with R.A.F. Squadrons Nos. 31, 117, 194 and 267.

When Japan entered the war in December 1941, No. 31 Squadron, R.A.F., was based in India with detachments of DC-2s flying long hours in an attempt to keep open vital routes including Rangoon to Calcutta. Three months later the squadron was engaged in evacuating the Allied forces from Burma. Its own base, because of enemy action, was moved from Akyab on the Burma coast to Dum Dum, near Calcutta. Their principal task was carrying reinforcements to Shwebo and Mandalay, with casualty evacuation on the return trip.

In the middle of April 1942 the squadron's first DC-3 arrived—R.A.F. serial number LR230. By the end of the month No. 31 Squadron had LR231 and LR232 also on strength. These three, plus DC-2K AX769, formed a detachment that moved to Dinjan and began operations. The remainder of the Squadron's aircraft retired to Lahore where they underwent a much needed overhaul.

Three DC-3s were received by No. 267 Squadron, R.A.F., in August 1942—one of which had its single

*B.O.A.C. operated 59 Dakotas of various marks during World War II in both civil and military guises on many overseas routes. This landing shot depicts G-AGGB, ex-FD773 C-47-DL which was delivered to the U.K. in February 1943, and registered to B.O.A.C. the following month. In 1949 it was sold to South Africa and was last registered in Israel. (Photo: Real Photos 2813)*



Editor's Note: When the R.A.F. introduced prefix letters to mark numbers in World War II—at which time these were in roman numerals—the letter "T" was already applicable to "Trainers". Thus instead of "Transport" the prefix became "C" for "Cargo" in line with the U.S.A.A.F. procedure.



Rare photo depicting a Dakota and an Armstrong Whitworth Whitley from No. 1 Parachute Training School, Ringway, operating over the dropping zone at Tatton Park, Manchester. As apposed to the Whitley which only carried ten paratroops in uncomfortable conditions, the Dakota carried twenty in comparative luxury. (Photo: Ministry of Defence 2923)

door on the starboard side—and, unfortunately their serials are not quoted. HK867 was a Dakota Mk. II used by No. 267 Squadron in 1942 and in June 1944 was based along with another Mk. II, FJ711, at No. 1 (ME) Captain's Course Unit at Bilbeis. HK983 was a Dakota Mk. I made up from the scrap heap, while HK993 was a C-47-DL (ex-U.S.A.A.F. serial 41-38625) which was finally purchased by Ambica Airlines and registered in India as VT-CLE in May 1947. The origins of LR230 and LR234 are not clear, although the c/n (construction number) of LR234 is given as 4851 by the Indian civil register, which indicates that its previous identity was ex-U.S.A.A.F. 41-20081. Both MA928 and MA929 were C-53s flown from California to Lahore via Cairo, and were allotted to No. 31 Squadron on June 12, 1942. MA 928 crashed on take-off at Agartala on March 25, 1943 and MA929 was missing on a flight from Tezpur to Dinjin on January 27, 1943.

#### ROYAL AIR FORCE DC-3s

- LR230** Individual letter "D". No. 31 Squadron April 1942. Destroyed Myitkyina May 6, 1942 by Japanese bombing.
- LR231** c/n 1915 NC16094 Eastern Airlines and used by Pan American Airways (P.A.A.) in Africa. To No. 117 Squadron April 15, 1942. To No. 31 Squadron as N16094, later LR321, "E". Destroyed Myitkyina May 6, 1942 by Japanese bombing.
- LR232** c/n 4130 NC33675 Capital Airlines and used by P.A.A. in Africa. To No. 31 Squadron April 1942. Crashed at No. 308 Maintenance Unit (M.U.) at Allahabad. Struck-off-charge (S.O.C.) September 4, 1943.

- LR233** c/n 1923 NC17313 Trans World Airlines (T.W.A.). To "H" No. 31 Squadron April 1942. S.O.C. October 25, 1942.
- LR234** "K" No. 31 Squadron April 1942. To No. 194 Squadron April 29, 1943. Indian National Airways, VT-ARR, August 31, 1943.
- MA925** c/n 4116 NC33653 American Airlines and used by P.A.A. in Africa. To No. 117 Squadron May 7, 1942. To No. 31 Squadron as N33653 later MA925. Air Headquarters (A.H.Q.) India Communications Flight, September 19, 1942. Indian National Airways, VT-ATB.
- MA943** c/n 4118 NC33655 American Airlines. U.S.A.A.F. C-49H-DO 42-38251. G-AGEN briefly at Air Reinforcement Centre, Karachi then MA943. Nos. 31 and 194 Squadron before Indian National Airlines, VT-ARI.

When the U.S Air Transport Command took over from Pan American Air Ferries in June 1942, an attempt was made to standardize the fleet to reduce the spares problem, and it is probable that this is when the DC-3s mentioned were handed over to the R.A.F.

#### FERRY AND TRANSPORT COMMAND

On July 20, 1941 the Atlantic Ferry Organization (A.T.F.E.R.O.) became the Royal Air Force Ferry Command. Air Chief Marshal Sir Frederick Bowhill, who had been directing R.A.F. Coastal Command in the Battle of the Atlantic, became C-in-C at Montreal. A mixture of civilian and service personnel continued to work together both in the air and on the ground.



With completion of the huge R.C.A.F. base at Dorval, Ferry Command moved out from Montreal on October 4 and this airfield became the hub of the whole organization.

In Canada, airmen from all over the world were being trained under the Commonwealth Joint Air Training plan. Within the space of one year they became operational units. Sir Frederick suggested that these newly-trained crews should be entrusted with the task of delivering operational aircraft, including Dakotas. The "one-trippers" as they were called, took on the Atlantic crossing even in winter, when many experts still considered it impracticable.

The Atlantic ferry had operated under a number of titles, and under several immediate controls. This was the result of a natural and logic growth. It was the Secretary of State for Air, Sir Archibald Sinclair, who first announced the change of title from Ferry to R.A.F. Transport Command on March 11, 1943 in the House of Commons.

Sir Frederick Bowhill took command of this world-wide organization and Montreal remained the headquarters for the North and South Atlantic. Apart from the steady expansion the changes in Command had not affected the flying.

By this time the first batches of Dakota Mk. Is for the R.A.F. were leaving the Douglas factory at Santa Monica in California. The first aircraft—FD768—was delivered at the factory on January 9, 1943 and the second—FD769—arrived in the U.K. on February 11 by the North Atlantic route into Prestwick, now well established as the transatlantic aircraft control point. Deliveries to the Middle East by the South Atlantic route were also in progress—FD774, the seventh Dakota Mk. I, arriving on the last day of March 1943. On the first day of April, FD781, FD786 and FD787 were delivered to India. Ferried in twos and threes, the flow of a suitable transport aircraft for the R.A.F. had begun.

## FURTHER EXPANSION

With the formation of Ferry Command in July 1941, to administer the whole business of ferrying aircraft across the Atlantic, No. 44 Group was formed in August at Gloucester to take over from the Overseas Air Movement Control Unit responsibility for all non-operational flights in and out of the U.K., which included Transatlantic delivery flights, the preparation and dispatch of aircraft to overseas commands, and the ferry training of aircrews.

On March 23, 1944, No. 44 Group was transferred to the newly-formed Transport Command. From April the function of the Group changed slightly to include a greatly increased training and ferrying programme. Aircraft of all types were ferried to the U.K. by various transatlantic routes and despatched to all theatres of war in increasing numbers. Dakotas in Britain were despatched from Portreath in Cornwall. Because of the increase in air transport activities, Dakota Operational Training Units were formed in No. 44 Group to provide the specially trained crews required for the increasing number of transport squadrons.

The Group relinquished control of scheduled services to No. 116 Wing in September 1944, but the control of aircraft entering or leaving the U.K. was undertaken by the Group through Overseas Aircraft Control located at Gloucester and the Transatlantic Aircraft Control located at Prestwick. Aircraft continued to be ferried to various places after the end of the war but reduced commitments made the existing ferry organization uneconomical and the Group was disbanded on August 14, 1946. Dakota squadrons which came under the jurisdiction of the Group included Nos. 24, 271, 510 and 511. Just prior to the disbandment, the last Dakota—KP231—for delivery to the U.K., having arrived with No. 45 Group Atlantic Transport Group at Dorval on June 15, was ferried across the Atlantic.

*In March, 1946, No. 1 PTS moved to Upper Heyford, Oxford. Dakota Mk. IV KK138 "S" C-47B-15-DK 43-49459 c/n. 26720 is seen on one of its many training sorties. This unit was responsible for the training of a large number of Allied paratroops and instructors plus, many resistance personnel.*

(Photo: I.W.M. R.276)





During World War II General Eisenhower did a tour of inspection of R.A.F. units in this unidentified Dakota which is similar to the early civil DC-3 with single fuselage door plus smaller baggage door aft. Air Marshal Sir Arthur Coningham is seen standing by the aircraft. (Photo: I.W.M. CH.12782)



Field Marshal Montgomery talks to General Omar Bradley who, unfortunately, hides the identity of this R.A.F. Dakota which carries the 5-star insignie and Union Jack on the fin. It is reputed that "Monty" used as many as five Dakotas throughout his career during and after World War II. (Photo: I.W.M. BU.8373)



H.M. King George VI, followed by General Alexander, steps down from General Maitland Wilson's personal Dakota Mk. III, FZ 631 named Freedom, a C-47A-1-DK 42-92391, c/n. 12187. This was in Italy on July 23, 1944 and one of the few occasions when the King flew in a Dakota. (Photo: I.W.M. CMA3027)

Dakota Mk. III KG459 C-47A-10-DK 42-92668 c/n. 12494 in SEAC markings with a jeep being loaded. This aircraft was one of the many R.A.F. Dakotas returned to the U.S.A. during and after World War II. (Photo: I.W.M. CF.145)

With the formation of Transport Command, a world-wide organization, Ferry Command became No. 45 Group with headquarters at Dorval, and responsible for all R.A.F. Dakotas delivered to the U.K. Within the Group, No. 231 Squadron was reformed in September 1944 and operated from Dorval with various transport types including Dakotas, providing a vital airline type service schedule between the factory plus many points in the U.S.A. and No. 45 Group Headquarters.

No. 46 Group, R.A.F. Transport Command was formed on January 17, 1944 with headquarters in Uxbridge Road, Stanmore, Middlesex and Air Commodore (later A.V.M.) A. C. Fiddament as Air Officer Commanding.

The 150 Dakotas allocated to the Group were hardly sufficient for the task it was to perform with its five squadrons. These were to operate from airfields located at Broadwell, Down Ampney and Blakehill Farm, selected because of their proximity to other R.A.F. stations to be used in launching airborne operations.

On D-Day, June 6, 1944, 108 Dakotas from Nos. 48, 233, 271, 512 and 575 Squadrons, under the operational control of No. 46 Group, dropped the main body of the 3rd Parachute Brigade in Normandy and also towed Airspeed Horsa gliders into action during *Operation Overlord*.

The S.E.A.C. (South East Asia Command) Commander, Lord Louis Mountbatten, required more Dakota squadrons to assist with the Allied advance in the Far East. In this context, in the U.K. No. 4 Group, R.A.F. Bomber Command occupied the Vale of York with its bases and Handley Page Halifax squadrons—resting after the cessation of hostilities in Europe. On April 7, 1945 the Group was renamed No. 4 Transport Group and selected squadrons began to re-equip with transport aircraft, mainly Dakotas. These included Nos. 10, 76 and 77 Squadrons which, after training, prepared to move to S.E.A.C., while No. 78 Squadron joined No. 216 Group in the Middle East.

### FERRY ROUTES

The origin of the ferry routes across Africa dates back to the mid-1920s when members of Nos. 45 and 47 Squadrons undertook a number of pioneering long-distance flights, the major one being to West Africa. It was from these flights, that the foundation of the routes used during World War II had their beginning.

Control of flying in the early days was vested in the Officer Commanding Khartoum and later, in the Commanding Officer of the Communications Squadron looking after the route. This state of affairs existed until late 1941 when No. 2 Middle East Ferry Control was established to take command of all the posts in the Sudan Sector—the majority of staging posts and all flying within that area; a similar control was formed from Takoradi the main assembly base, to cover West Africa.

Two aircraft delivery units were formed of pilots and other aircrew to ferry the variety of aircraft from assembly point to the maintenance units near the front line. The main unit was No. 2 Aircraft Delivery Unit (ADU) which was based on a house boat in Cairo. The aircraft were ferried in convoy with “mother” aircraft and “chicks”. The timing depended very much on the



*FL-503 Dakota Mk. III C-47A-50-DL which served with both Nos. 216 and 353 Squadrons, parked on a strip in India with steel-helmeted Gurkas ready to board the transport.*

(Photo: I.W.M. CF.150)

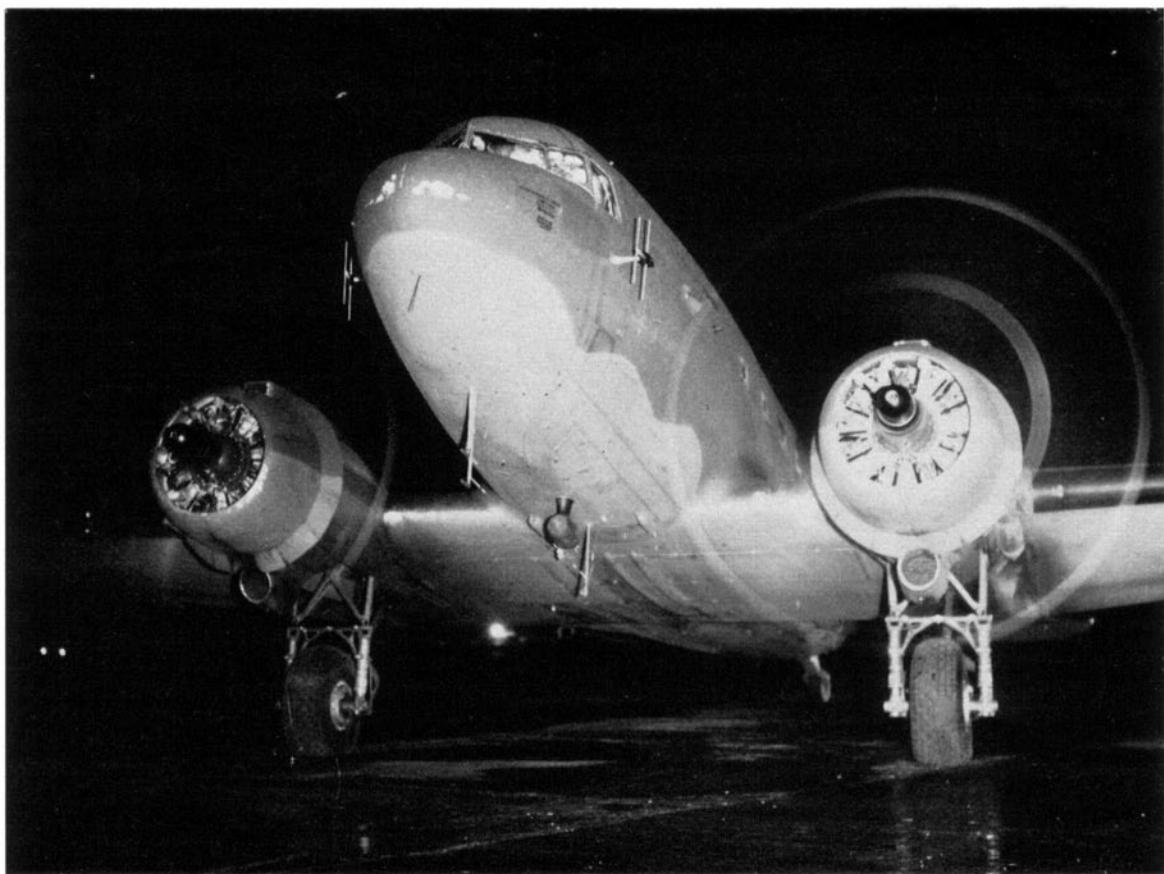
weather but basically it was a day's hop between staging posts. The navigation equipment on the route was very limited and the most one could really hope for were medium frequency beacons on continuous wave (CW) and, therefore, the main method of navigation was dead reckoning (DR) and local knowledge. The number of aircraft lost through errors of navigation were comparatively few.

A large base and an assembly plant was established at Takoradi by the R.A.F.; built on top of red cliffs on the outskirts of the vivid Gold Coast bush. The existing facilities had to be rapidly extended; new workshops, hangars and runways were made. From Takoradi fighters, bombers and transport Dakotas were ferried in the many air convoys across Africa to Cairo West—or LG224 as it was known to many.

The South Atlantic route to Africa had been initiated by the U.S. over territory which was partly British, partly American and partly Brazilian. In December 1942, R.A.F. Ferry Command established a receiving point at Nashville, Tennessee with 25 aircrews from Dorval, Canada. The main base for the South Atlantic was at West Palm Beach on the southern tip of Florida.

The first main staging post across the treacherous air of the Caribbean was in Trinidad, though R.A.F. aircraft had the use of an American post in Puerto Rico, a little more than half-way across. From Trinidad usually they flew in one hop to a point in Brazil near the mouth of the Amazon. The next leg brought them to Natal, near the most easterly tip of Brazil. Here aircraft were prepared for the 1,400-mile flight across the Atlantic to Ascension Island. The route from Ascension Island is direct to the Gold Coast. It was a longer route than the North Atlantic. Its advantages were shorter hops, fairer weather, and more direct access to Africa without the hazards of the Bay of Biscay. In February 1943, the receiving point moved from Nashville to Nassau, one hour's flying time from Miami. Losses were few, although KG508—a Dakota Mk. III—crashed off the Brazilian coast on delivery.

As early as November 1940, the R.A.F. had undertaken to fly U.S.-built bombers across the Atlantic from Canada by way of Newfoundland to Scotland. After passage of Lend-lease Act early in 1941, the U.S. assumed an active part in the joint effort to take full advantage of the “stepping-stone” provided by Newfoundland, Labrador and Iceland and so make



*Excellent night photo of an R.A.F. Dakota showing in detail the two Pratt & Whitney Twin Wasp R-1830 engines each of which developed 1,200 h.p. The Dakota Mk. I-III had the -92 models with single-speed blowers, while the Mk. IV had the -90B with two-speed blowers. (Photo: I.W.M. CH.14728)*

possible the ferrying of short-range fighters from North America to the U.K.

During the preceding July the United States had sent engineers to Narsarsuak in Greenland for the building of the air base that came to be known as Bluie West I (BW-1). In the following September, work began on BW-8, a much more northerly base on the west coast of Greenland. U.S. forces had taken over the defence of Iceland in July 1941, where they improved the airstrips previously occupied by the R.A.F. In the Spring of 1942, they began to build two new airfields—Meeks and Patterson—near Keflavik.

Prestwick, in Scotland, had been developed in 1941 from an ordinary airfield to the key terminus for the Allies and was to be the final delivery point for many R.A.F. Dakotas. The U.S. Air Transport Command shared the facilities at Prestwick. The aircraft were serviced by civilian personnel and those intended for the R.A.F. were distributed throughout the U.K. by the gallant men and women in the dark blue uniforms of the Air Transport Auxiliary. The route was open and being put to good use by both the R.A.F. and the U.S.A.A.F.

A Waco CG-4A (R.A.F. Hadrian) glider—FR579—fully laden with vaccines for the U.S.S.R., plus urgent radio, aircraft and motor parts, was towed across the Atlantic by a Dakota Mk. I (FD900) of R.A.F. Transport Command during June 1943. The flight from Dorval, Montreal, to Prestwick was done in

stages totalling 28 hours flying time to cover the 3,500 miles. It was an experimental flight, the first of its kind and no special emphasis was laid on the accomplishment. It provided information regarding the possibilities of an Atlantic air train service but, unfortunately, R.A.F. Transport Command never propounded the advantages of towing the load instead of carrying it inside a Dakota with extra tanks fitted.

### **B.O.A.C.**

On December 17, 1942 a British Member of Parliament, Mr. W. D. Perkins, again drew the House of Commons attention to the plight of B.O.A.C. and the inability of its fleet to keep up the demands made of it. This time the Government acted and, through the Lend-lease scheme, B.O.A.C. acquired, together with other aircraft, a number of Douglas (Long Beach-built) C-47-DL Dakota Mk. Is which were delivered between February and April 1943. These aircraft carried R.A.F. serials, acquiring civil marks on registration. Later in 1943 the Dakota Mk. Is were subject to a compulsory modification that changed their 12-Volt electrical system to 24-V. Thirty C-47As were supplied to B.O.A.C. between April 1943 and July 1944, all were Dakota Mk. IIIs.

Three Dakota Mk. IIIs were diverted to expatriate Netherlands' K.L.M. to replace three which had been lost—G-AGBB, G-AGBC and G-AGBI. These replacements were C-47A-1-DKs FL589 (G-AHJR);



FZ618 (G-AGJS) and FZ617 (G-AGJT). They were delivered during the first few months of May 1944 and in early 1946 were re-registered in the Netherlands as PH-TAY, PH-TAZ and PH-TBA respectively.

Following the C-47A Dakota Mk. III came the C-47B Dakota Mk. IV and 23 were supplied during late 1944. By the end of hostilities B.O.A.C. had accepted 59 Dakotas, delivery for the majority being by way of the North Atlantic ferry route under No. 45 Group.

B.O.A.C.'s main U.K. wartime base was at Whitchurch near Bristol, but from November 1944 operations moved to Hurn, retaining Whitchurch as the maintenance base. Subsidiary bases were at Croydon, Lyneham, Leuchars and, as the war progressed in the Allies favour, Cairo. All aircraft were delivered in a dark green and earth camouflage on all upper surfaces. Some were black underneath and others natural metal. Following the total loss by enemy interception of K.L.M. DC-3 G-AGBB on June 1, 1943—the famous actor Leslie Howard was a passenger—all aircraft were painted black underneath, as crossing of the Bay of Biscay were only permitted during the hours of darkness. Civil registrations were black outlined in silver on the upper wing surface and fuselage side, but either white or black under the wings depending on the finish. Red, white and blue stripes appeared beneath the letters on the fuselage and under the wings, with red and blue stripes under the upper wing registration. Initially a large Union Jack appeared on the nose, but this was later replaced by a large B.O.A.C. "Speedbird" device, outlined in silver. When flights

were made on behalf of R.A.F. Transport Command, aircraft carried military serials instead of civil registrations. Most of the fleet changed guise many times, and even the crews had two sets of uniforms. At the end of 1944, additional markings appeared alongside the R.A.F. serial numbers. These were Transport Command four or five letter wireless telegraphy (W/T) call-sign codes in white on the fuselage side, an example being C-47A-25-DL Dakota Mk. III G-AGHK FD860 "ODZHK". The changing of military and civil markings continued until March 1946.

B.O.A.C. Dakotas were first introduced in service on the Whitchurch to Lisbon route on May 11, 1943. This replaced the K.L.M. DC-3 service and operated four times a week. During 1943, Dakotas appeared on services to Gibraltar, Madrid, Takoradi and Cairo. On November 20 a Whitchurch to Algiers service was begun, routing via St. Mawgan and Gibraltar outbound, and Rabat and Gibraltar on return. Aircraft had R.A.F. markings and crews wore R.A.F. Reserve uniforms. Also during 1943 Leuchars-based Dakotas operated the Stockholm ball-bearing runs, but were replaced by de Havilland Mosquito aircraft until the first day of September 1944 when the route proved safer for the slower Dakotas. On April 16, 1944, B.O.A.C. took over the responsibility, from R.A.F. Transport Command, of the Whitchurch to Lagos service, routing via St. Mawgan, Lisbon, Rabat, Fort Etienne or Dakar, Bathurst, Freetown and occasionally, Abidjan, Takoradi and Accra. This was known as Route 23W. The Whitchurch to Algiers service was



*Camouflaged Dakotas of No. 267 Pegasus Squadron parked at Bari, Italy, during 1944. Dakota Mk. IIIs, KG496, FL586 and FD857, are in the foreground. Other types identified in the photo include Thunderbolts, Lightnings, Liberators, Fortresses and, of course, many more Dakotas. (Photo: I.W.M. CNA3333)*



*With the U.S.A.A.F. serial 348266 this C-47B-1-DK 43-48266 c/n. 14082/25527 has R.A.F. markings plus invasion stripes and is depicted on its way to France with supplies shortly after D-Day. The port wing shows clearly where the U.S.A.A.F. insignie was. The aircraft was later returned to the U.S. forces and was seen by the author at Northolt in September 1949.*

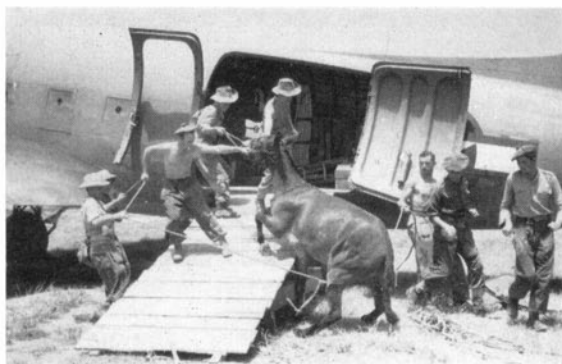
(Photo: I.W.M. EA55331)

*Carrying an R.A.F. fin flash this Santa Monica-built C-47-DL 41-38592 c/n. 4541 is one of the many of its type which served the Allies. Note the supply cannisters carried on external racks below the fuselage. After World War II, it served in South America before delivery to the French Air Force in 1957.*

(Photo: I.W.M. E.24626)







Typical scene in the SEAC theatre when everything except the kitchen sink was supplied to General Orde Wingate and his Chindits. Here a mule is carefully persuaded to take a flight in a Dakota of the Third Tactical Air Force. Aircraft were interchangeable as seen by the U.S.A.A.F. fuselage markings. (Photo: I.W.M. CI.1582)

extended to Cairo via Tripoli on June 27, 1944. Algiers was omitted from October and St. Mawgan when the operations transferred to Hurn during November. Also during 1944 B.O.A.C. was operating a service from Cairo across Africa to Accra via Wadi Halfa, Khartoum, El Fasher, El Geneina, Maiduguri, Kano and Lagos. This connected with the Whitchurch, later Hurn, to Accra service; the flight from the U.K. to Egypt taking normally five to six days.

By the end of the hostilities in Europe, on May 8, 1945, of the 59 Dakotas B.O.A.C. had acquired, no fewer than 55 survived the war—an excellent record gained under arduous conditions. On March 4, 1946 the B.E.A. (British European Airways) Division of B.O.A.C. began operating under civil markings but still using Dakotas.

## AIRBORNE FORCES

The only aircraft that were available to the British Airborne Forces from their inception in 1940 were those that could be spared reluctantly from the hard-



Dakota Mk. III FD-946 "Y" from one of the two R.C.A.F. Dakota squadrons which served in SEAC. C-47A-40-DL 42-24005 c/n. 9867. Note the cannister racks under the fuselage. Nos. 435 and 436 Squadrons were part of the huge Combat Cargo Task Force made up of many Allied transport units. (Photo: I.W.M. NYF21222)

The R.C.A.F. used the Dakota extensively during and after World War II. Depicted is a Mk. III FL618 "DM" C-47A-1-DK 42-92258 c/n. 12039 flying over the Canadian seaboard. This aircraft went to the R.C.A.F. in 1944 and later flew with TCA as CF-TDQ and was last registered in the U.S.A. as N4995E with Frontier Airlines. (Photo: Canadian Armed Forces PL144827)



## Key to colour illustrations

- 1 Dakota Mk. IV KN434 "A" of 1325 Flight C-47B-30-DK 44-76531 construction no. 16115/32863. Christmas Island Airways, formed for *Operation Grapple*.
- 2 Dakota Mk. IV KG496 C-47A-20-DK from No. 267 *Pegasus* Squadron.
- 3 Dakota Mk. III FZ669 C-47A-5-DK 42-92452 c/n. 12254. Allocated to the R.C.A.F. August 26, 1946 and in use with Canadian Armed Forces, 1970.
- 4 DC-3-G102 33655 c/n. 4116 ex-NC33655 American Airlines, later MA925 with No. 31 Squadron in India. Powered by Wright Cyclone G102s.
- 5 Dakota Mk. III KG374 C-47A-5-DK 42-92568 c/n. 12383. Flown by Flight Lieutenant David Samuel Anthony Lord, V.C., D.F.C., No.271 Squadron.

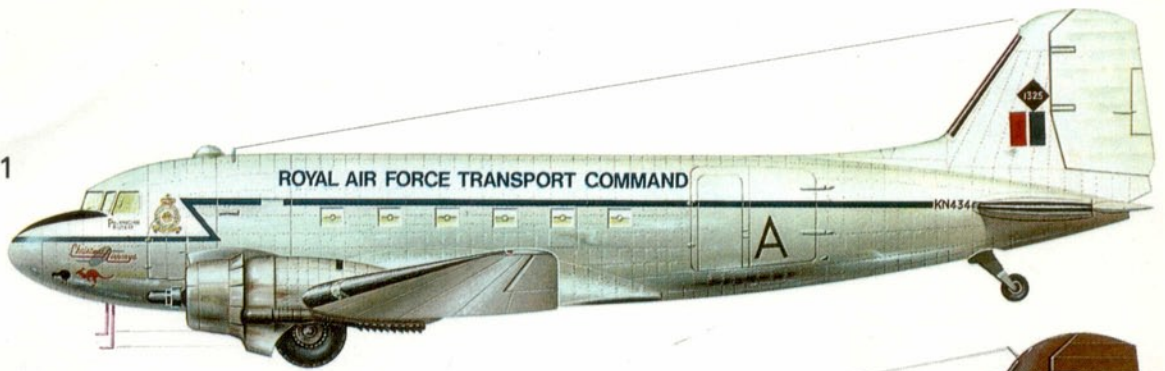
pressed R.A.F. Bomber Command. Some of these aircraft were already obsolete at this time and all of them unsuitable for dropping parachutists by present day standards. These aircraft were cramped and uncomfortable for the parachute troops and exits could be extremely dangerous. However, it was a case of "needs must when the devil drives" and such aircraft as the Armstrong Whitworth Whitley and Vickers-Armstrong Wellington, to name but two of the earlier types, were used, not only to drop parachute troops but also to act as glider tugs.

In May 1942, Churchill was investigating the possibility of providing more aircraft for airborne training. However, although the R.A.F. was prepared to provide aircraft for specific operations, it was not in a position to make further provision for training. The real solution to the problem lay in increasing supplies of transport aircraft from the U.S.A. The Prime Minister cabled President Roosevelt explaining the position and the President's reply was a promise of indirect help only. It was impossible to supply transport aircraft to the R.A.F. because of the tremendous demands of the U.S. forces but he promised that four Transport Groups of the U.S.A.A.F. would be arriving in England in June-July 1942. These four Groups would be equipped with 208 aircraft and by November it was hoped that the arrival of further Groups would increase the total to 416 aircraft. On reaching the U.K. all these Groups would be available to assist the British Forces both in operations and in training.

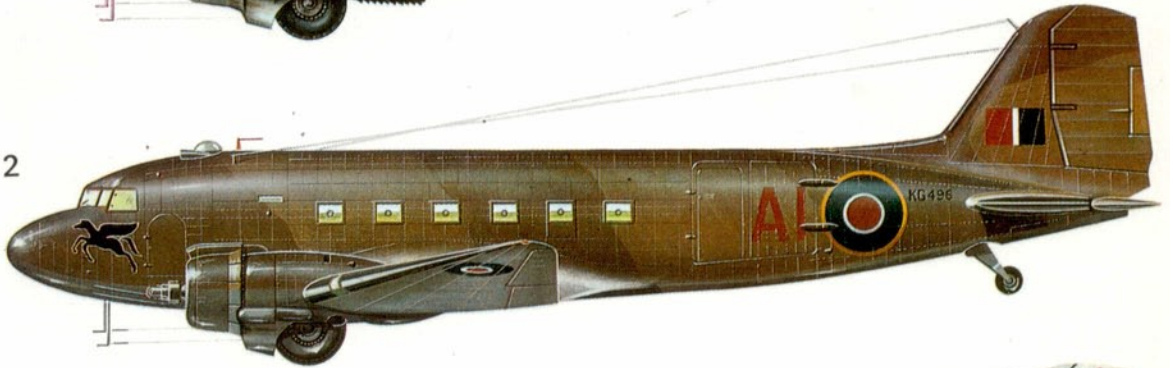
Throughout 1942-43, requests were made by No. 1 Parachute Training School at Ringway, near Manchester, for the allocation of a Dakota aircraft so that door jumping experience could be gained by the instructional staff. The experiences of the 1st Parachute Brigade in North Africa during November 1942 added weight to this appeal for during their operations, this Brigade was making its first descents from this type of aircraft, and casualties were high because of this. But the request of the Parachute Training School was not granted until September 1943.

The R.A.F. used the Dakota Mk. I, III and IV for airborne duties, principally for re-supply duties and for the carriage of troops plus towing gliders such as the

1



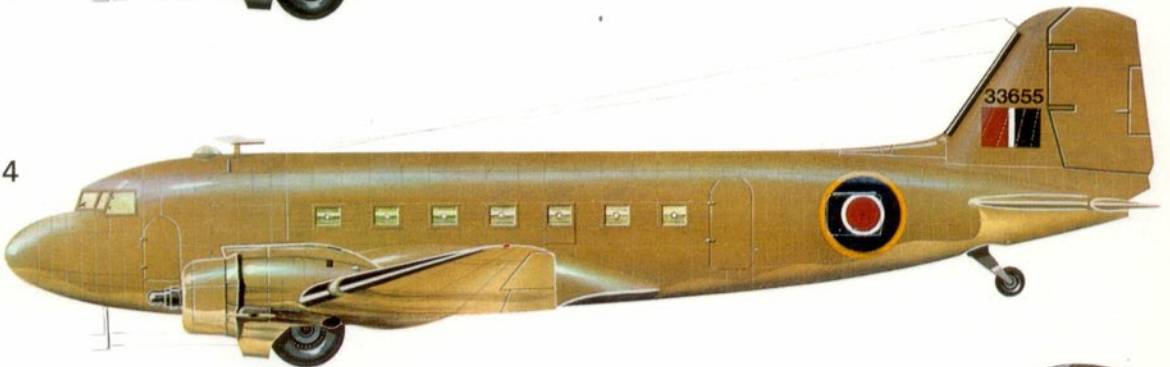
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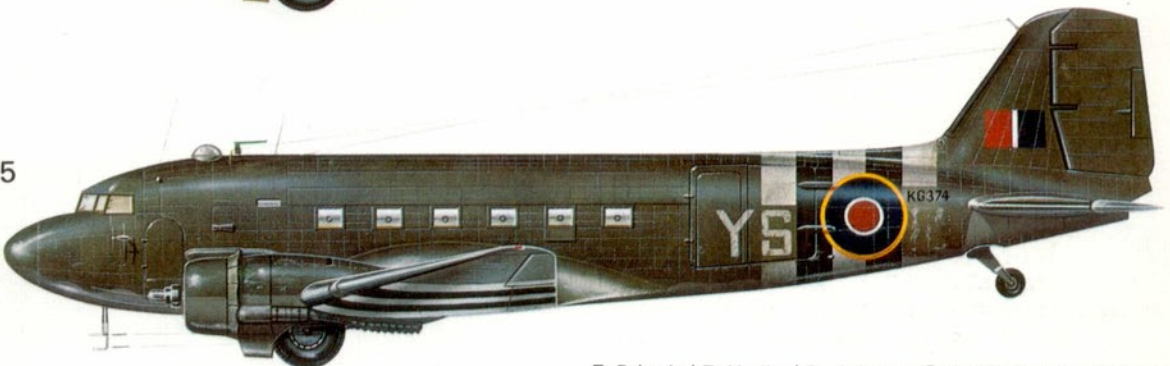
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Rare photograph taken at Blackbushe in 1945 showing (left to right) Air Chief Marshal Sir Frederick Bowhill, A.O.C. of Ferry and later Transport Command, Air Commodore Fielden of Queen's Flight fame, Wing Commander D. E. Bennett, O.C. Flying at Blackbushe and Squadron Leader Nobby Clark. (Photo: Wing Commander D. E. Bennett)



Dakota Mk. IV KN628 was taken over by Field Marshal Montgomery in July 1945 and personal pilot was Squadron Leader G. H. Duncan. The full crew plus "Monty" are seen here at Blackbushe in 1945. Compare with photo opposite and see colour illustration No. 6 for interpretation of nose and tail markings. (Photo: Wing Commander D. E. Bennett)

Airspeed Horsa and the Waco Hadrian. Twenty paratroops in full equipment could be carried seated in the fuselage and exit was made from the door on the port side of the aircraft.

The following are the major Airborne Operations in Europe, North Africa and Far East theatres in which the Dakota was used in the paratroop and glider-tug rôle.

<b>North Africa</b>	November 1942	1st Parachute Brigade dropped from C-47s of No. 60 Group U.S.A.A.F.
<b>Sicily</b>	July 9-10, 1943 July 13-14, 1943	Operation <i>Ladbroke</i> —gliders. Operation <i>Fustian</i> —paratroops and gliders
<b>Greece</b>	August 15, 1943 November 1-2, 1943	Cos: 11th Parachute Battalion paratroops. Samos: Greek Sacred Squadron—paratroops.
<b>Italy</b>	June 1, 1944	Operation <i>Hasty</i> —paratroops.
<b>Normandy</b>	June 5-6, 1944	Operation <i>Overlord</i> —paratroops and gliders.
<b>S. France</b>	August 10, 1944 August 15, 1944	Operation <i>Bigot Dragoon</i> —paratroops. Operation <i>Anvil Dragoon</i> —paratroops.
<b>Greece</b>	September 14, 1944	Operation <i>Manna</i> —paratroops.
<b>Arnhem</b>	September 17, 1944	Operation <i>Market Garden</i> —paratroops and gliders.
<b>Rhine</b>	March 24, 1944	Operation <i>Varsity</i> —paratroops and gliders.
<b>Burma</b>	March 5, 1944	Operation <i>Thursday</i> —paratroops and gliders.
<b>Rangoon</b>	May 1, 1945	Operation <i>Dracula</i> —paratroops.

After the end of World War II, the Dakota continued in use as the main aircraft used by British Airborne Forces. Training and exercises were carried out in the paratrooping rôle in Palestine, Egypt and Europe. Just before the cessation of hostilities in the Far East, Dakotas and their crews were being trained in glider-snatch operations at Ibsley, Hampshire using Hadrian (Waco CG-4A) gliders loaded with concrete blocks. In S.E.A.C. there was a shortage at one time of Dakota pilots, so it was proposed to train glider pilots to fly this unique transport. The last operational drop carried out by the R.A.F. Dakota was in Malaya in February 1952 when personnel of the 22nd Special Air Service were dropped into primary jungle. As a fitting tribute to all those "Red Berets" who gave their lives for the cause of freedom, a Dakota C.4 (KP208) stands outside the Airborne Forces Museum at Aldershot in Hampshire.

### R.A.S.C. AIR DESPATCH

It was within the framework of Airborne Forces that Royal Army Service Corps (R.A.S.C.) Air Despatch was born. In June 1940 the first parachutists were trained at Ringway and by 1942 the first Airborne Division was taking shape, and it was then realised that once on the ground these airborne troops would need supplies so the Air Despatch Group was formed under control of the War Office.

The first air despatch operation took place in Burma during its evacuation in 1942. During the Battle of Arnhem from September 17-25, 1944, a total of 116 Air Despatchers gave their lives and, as a result of its part in the operation, Air Despatch Group was awarded the right to wear a formation sign of its own. It was designed by the Commander of 48 Air Despatch and it represents a yellow Dakota on a blue background. Depicted in two of the R.A.S.C. colours, this flash has, since Arnhem, been worn by personnel instead of district or War Office-controlled signs. They are allowed to fly a flag of the same design in their unit lines, a privilege which has been exercised ever since.

### ARNHEM AND A VICTORIA CROSS

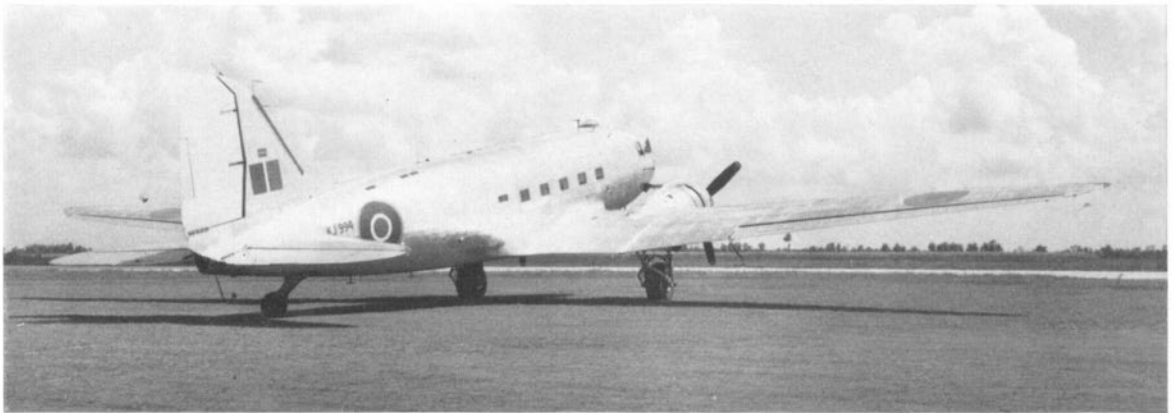
Surrounded, hammered by German armour and under increasing attacks by elite S.S. formations, the position of the airborne troops at Arnhem began to look ominous by the morning of September 19, 1944. Fighting from houses, slit trenches and ditches, often only with small arms, the "Red Devils" knew that they could only hold on until relieved by the British Second Army thrusting northwards through Belgium if adequate reinforcements and weapons could be dropped to them.

But the weather was veering against them and threatening successful air support. That day, R.A.F. Transport Command again decided to put on a maximum effort to supply them. Among the squadrons was No. 271 operating out of Down Ampney. Commanded by Wing Commander Booth, it was already a battle-hardened formation. It had dropped paratroops on the night of the first landings in Normandy, and since had operated over the Normandy beachheads, at the Falaise Gap; while, at Brussels, its Dakotas were unloading supplies at the airport while fighting went on alongside. It was on the first drop at





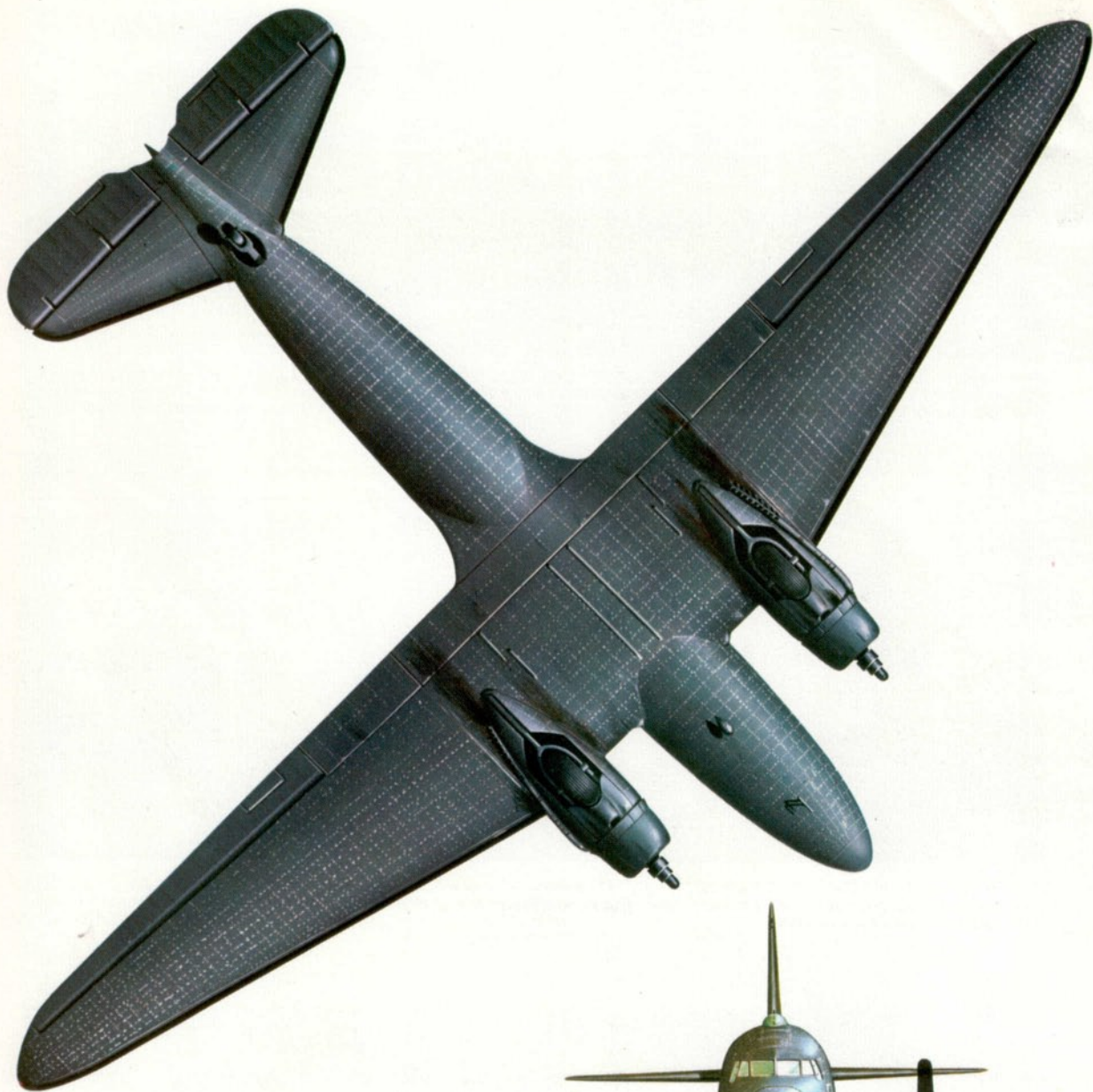
*Reputed to be the most decorated aircraft in the R.A.F., Dakota Mk. IV KN628 C-47B-35-DK 44-76950 c/n. 16534/33282 was used extensively by Field Marshal Montgomery from July 1945 to January 1956, when it was purchased by Derby Aviation and registered G-AOGZ Darley Dale. (Photo: Ministry of Defence CHP.806)*



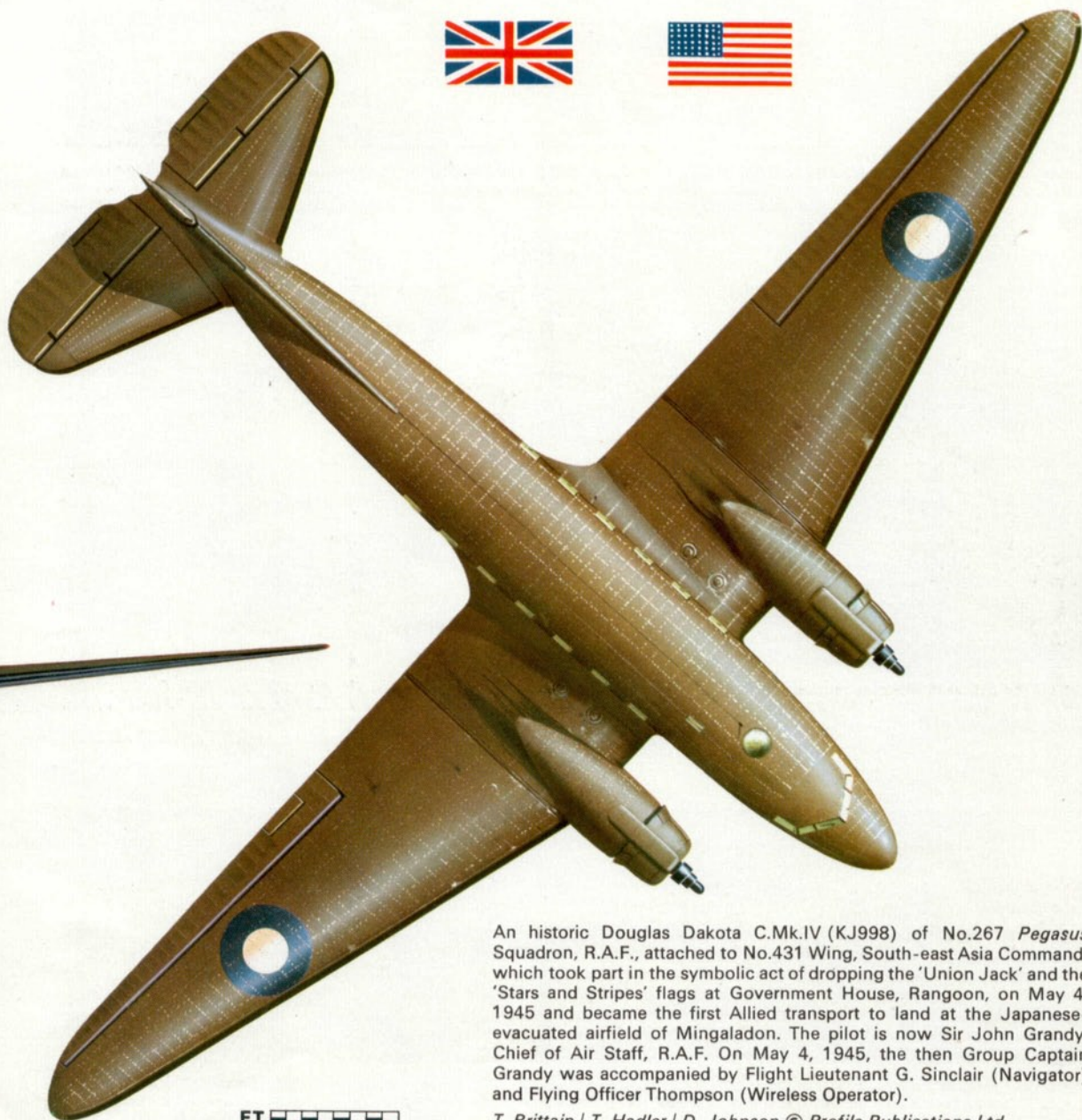
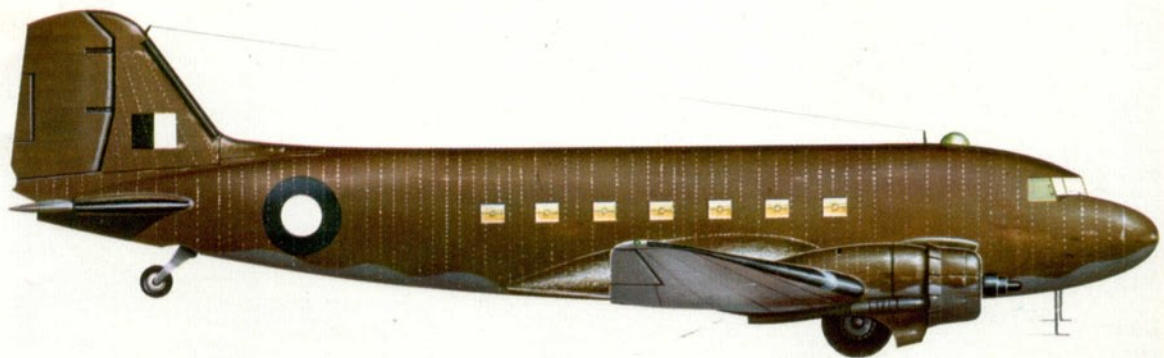
*Dakota Mk. IV KJ994 C-47B-10-DK 43-49174 c/n. 26433 was modified as a V.I.P. aircraft for Air Chief Marshal Sir Arthur Tedder and named Dulcie. Note rank badge above fin flash plus extra windows in roof of fuselage. KJ994 also served with No. 24 (Commonwealth) Squadron on V.I.P. duties. (Photo: I.W.M. CNA.3736)*



*Taken over by the R.C.A.F. in August 1946 from the R.A.F., Dakota Mk. III KG568 C-47A-20-DK 42-93267 c/n. 13160 was modified for RESCUE operations. One of eight Dakotas donated to the Indian Air Force in November 1962 by the R.C.A.F. (Photo: Canadian Armed Forces)*







An historic Douglas Dakota C.Mk.IV (KJ998) of No.267 *Pegasus* Squadron, R.A.F., attached to No.431 Wing, South-east Asia Command, which took part in the symbolic act of dropping the 'Union Jack' and the 'Stars and Stripes' flags at Government House, Rangoon, on May 4, 1945 and became the first Allied transport to land at the Japanese-evacuated airfield of Mingaladon. The pilot is now Sir John Grandy, Chief of Air Staff, R.A.F. On May 4, 1945, the then Group Captain Grandy was accompanied by Flight Lieutenant G. Sinclair (Navigator) and Flying Officer Thompson (Wireless Operator).

FT

T. Brittain | T. Hadler | D. Johnson © Profile Publications Ltd.





*Action photo of Dakota Mk. III KG414 CB-414 C-47A-10-DK 42-92627 c/n. 12449 using RATOG bottles for take-off. KG414 served with the R.A.F. with No. 48 Squadron as "12-UG" during World War II, sold to the R.C.A.F. in August 1946 and one of eight Dakotas donated to the Indian Air Force in November 1962. (Photo: Canadian Armed Forces PL-88448)*



*Not all the R.C.A.F. Dakotas retained their R.A.F. serial numbers. Study of Dakota Mk. IV, R.C.A.F. No. 1000 C-47B-30-DK 44-77036 c/n 16620/33368 KN655 used extensively by R.C.A.F. Air Transport Command on V.I.P. duties. Served as "PU-H" of No. 53 Squadron, sold to the R.C.A.F. in 1946, declared surplus in 1967 and sold as CF-WQN. (Photo: Canadian Armed Forces, PL-102411)*



*The United Nations Emergency Force in the Middle East consisted of R.C.A.F. aircraft including Dakotas, many of which were ex-R.A.F. Taken in March 1957 at Gaza, a United Nations' white Dakota is shown alongside a United Nations' Otter, both ex-R.C.A.F. (Photo: United Nations, 53657)*



*Men and machines were recalled for Operation Plainfare in 1947. Still in drab wartime camouflage Dakotas of No. 271 Squadron are seen at Fassberg. YS-H is KN696 C-47B-30-DK 44-77074 c/n. 16658/33406. Note R.A.F. Transport Command badge on nose.*

(Photo: Peter Berry, Air-Britain)

Arnhem on Sunday, September 17, when the greatest airborne armada ever undertaken consisting of 155 Dakotas plus 358 gliders carrying the 1st British Airborne Division flew into the Netherlands. No. 271 Squadron carried paratroops, and the next day went in again with glider troops. After the first twenty-four hours, the flak had become formidable.

Among the pilots from No. 271 who attended a briefing just before noon on September 19 was Flight Lieutenant D. S. A. Lord who had learnt his air support in Burma with No. 31 Squadron, where he was awarded a Distinguished Flying Cross. He and his crew were detailed to fly supplies in to the troops fighting desperately to maintain their position at Arnhem. He knew that his load of panniers, filled with high explosive, was most urgently required by them. The weather was poor, and it was doubtful if fighter cover would be provided. It was even uncertain if the Dropping Zone (DZ) was still in the hands of our troops, but Flight Lieutenant Lord took off, with orders to drop his load of eight panniers as long as he could find the appropriate ground markings. It was no new work to this crew—they had operated on D-Day and they had been to Arnhem before. They knew what to expect and went with their eyes open and courage in their hearts.

With Flight Lieutenant Lord as regular crew were—Pilot Officer Dick Medhurst second pilot (and son of Air Chief Marshal Sir Charles Medhurst), Warrant Officer Alec Ballantyne, and, as dispatchers on the aircraft four Army personnel of 223rd Company R.A.S.C.—Corporal Nixon, Drivers Harder, Ricketts and Rowbotham. Flight Lieutenant King, an experienced navigator, had been asked by the pilot to fly with him as the regular navigator was not available. The aircraft was a Dakota Mk. III (KG374) which had already flown many hours with the squadron on supply missions.

Flight Lieutenant Lord approached the Dropping Zone below the cloud-base with a visibility of 2,000 yds.

A minute and a half before reaching the DZ, his aircraft was hit for the first time, and the port engine set on fire. He made his first run with this engine burning, but could not see clearly enough to drop his load. He started a second run, and this time dropped half the panniers, but his aircraft was hit again and the starboard engine caught fire. He then began a third run, with the port engine and the starboard wing on fire, and dropped all but two of the remaining panniers. Finally, with almost incomparable determination, Flight Lieutenant Lord brought his aircraft, now aflame from wing tip to wing tip, on a fourth run to drop the last of his load. This he did, but after the last pannier fell, the aircraft blew up and fell into the DZ. Flight Lieutenant King was thrown clear of the Dakota and was the sole survivor.

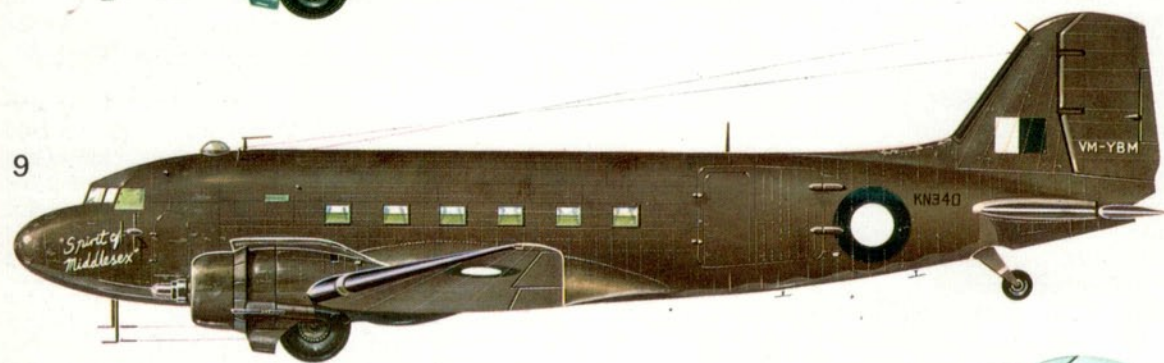
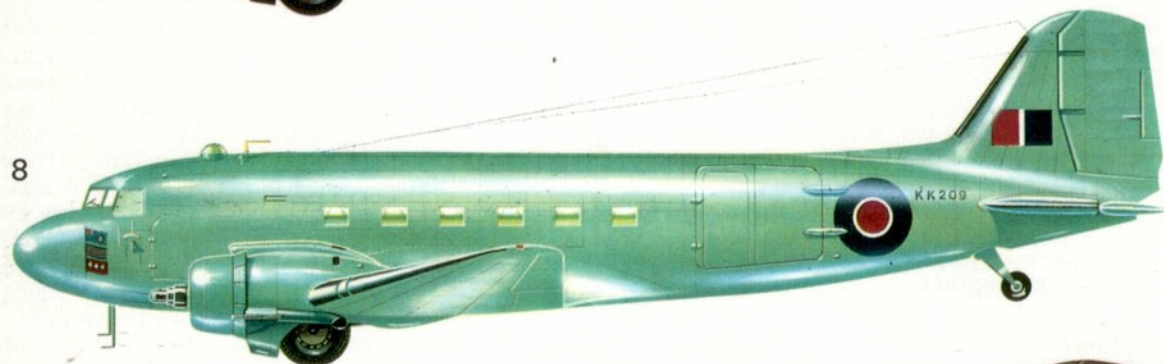
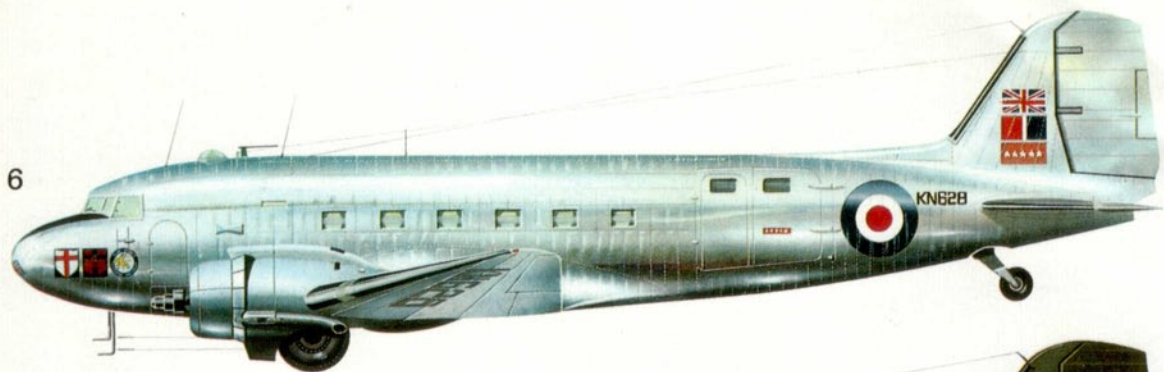
The details of this inspiring episode were seen and reported by the British troops below. They would agree that truly the already legendary heroism of the troops fighting around Arnhem was worthily matched by the courage of this pilot who flew in their support.

On November 13, 1945 Flight Lieutenant David Samuel Anthony Lord, D.F.C., was awarded a posthumous Victoria Cross by H.M. King George VI.

### THE MIDDLE EAST

Based in the Middle East since 1922 in the transport rôle, No. 216 Squadron flew Douglas DC-2 and DC-3 aircraft, re-equipping with Dakotas in 1943 while at Cairo West. Under the newly-formed R.A.F. Transport Command it began operating new scheduled routes—the normal “territory” covering Egypt, Italy, West Africa, Iraq and Persia, but was particularly concerned with the Western Desert.

After the Salerno landings the squadron flew in reinforcements and supplies. In the Autumn it flew in support of the Aegean campaign dropping Greek paratroops it had assisted to train earlier in the year at No. 4 Middle East Parachute Training School located at Ramat David, near Haifa in Palestine.





## Key to colour illustrations

- 6 Dakota Mk. IV (R.A.F. serial KN628) C-47B-35-DK (ex-U.S.A.A.F. 44-76950) c/n. 16534/33282—Field Marshal Montgomery.
- 7 Dakota Mk. III KG748 CMV-90 C-47A-30-DK 43-48031 c/n. 13847/25292. Used by No. 147 Squadron, 110 Wing, Croydon Airport, London, England.
- 8 Dakota Mk. IV KK209 C-47B-20-DK 43-49728 c/n. 15544/26989. Air Chief Marshal Sir Arthur Coningham. Later returned to U.S.A.F. and in 1956 allocated to West German Air Force as GA-117, later XA-117.
- 9 Dakota Mk. IV KN340 VM-YBM *Spirit of Middlesex* No. 243 Squadron C-47B-25-DK 44-76323 c/n. 15907/32655. Was based in Australia to support the British Pacific Fleet.
- 10 Dakota Mk. IV KN666 United Nations C-47B-35-DK 44-77037 c/n. 16621/33369—R.C.A.F. July 20, 1946—Indian Air Force November 1962.

During the winter of 1943–44 216 Squadron aircraft were flying as far afield as Moscow and Tehran. The Dakota supported the 8th Army's advance to Tunisia, complete fighter wings being moved by air on the heels of the retreating enemy.

No. 267 (*Pegasus*) Squadron maintained a nightly schedule between the Canal Zone and Malta with its Dakotas during 1943, one of the few links the besieged island had with the outside world. While based at Bari, in Italy, the squadron maintained useful supply routes to assist Marshal Tito in Yugoslavia and evacuated his casualties. Their Dakotas were first at Belgrade and Bucharest; while a suitably modified Dakota flew into Poland to bring home, among other items, a V-1 "Flying Bomb".

On April 30, 1941 the formation of No. 117 Squadron at Khartoum from a detachment of No. 216 Squadron was effected, and became famed as its

*This plaque is a tribute to the ubiquitous Dakota and was presented to R.A.F. Gatow by the crews from the R.A.F., S.A.A.F., R.A.A.F., and R.N.Z.A.F. who flew on Operation Plainfare with the eight Dakota squadrons involved. The plaque is still on display in Station Headquarters at R.A.F. Gatow.*

(Photo: Commanding Officer, Royal Air Force, Gatow)

*As the Dakotas employed on the Berlin Airlift were withdrawn for major overhaul the drab camouflage was removed. Taken at Wunstorf in 1947 with damaged Luftwaffe aircraft and hangars in the background photo shows Dakota Mk. IV KNS18, "XK-Y", of No. 46 Squadron.*



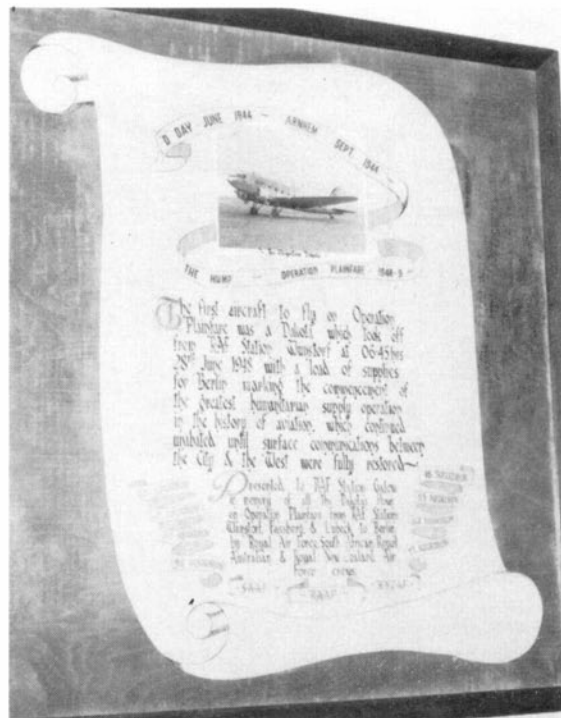
worthy forebear. Originally it had an odd assortment of aircraft including Bristol Bombays but, on moving to Bilbeis (between Cairo and Alexandria), it began training on newly-acquired Douglas DC-2s for the squadron's future rôle of transport support. At this time civilians were evacuated from hard-pressed Malta and the squadron took on charge its first Dakota. Wherever the advancing troops went the Dakotas followed, ferrying stores, food and ammunition and evacuating the casualties—often under fire. Even before Sicily fell, a detachment of Dakotas was based at Catania.

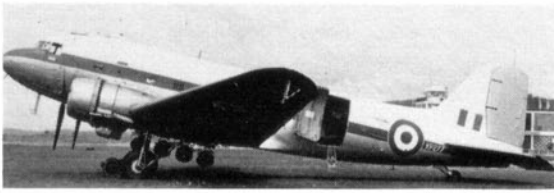
However, there was a great need in S.E.A.C. for the Dakotas and by 1944, No. 216 Squadron had a detachment in South-East Asia. Also, No. 177 Squadron left the Middle East for India to help in the Burma campaign—others were to follow.

## SOUTH EAST ASIA COMMAND

Every theatre commander desired and needed the U.S.-built Dakota, a two-engined aircraft without arms or armour but with a fine facility for carrying reasonable loads of supplies or men at reasonable speeds and often in unreasonable conditions. At the start of 1942, the Burma-India theatre, because of the poverty of ground communications, needed these aircraft more perhaps than any other zone. The DC-2s and DC-3s were of early vintage, some of the engines had a history of 10,000 hours when the R.A.F. took them on charge, but they arrived in the theatre at a time when they were required almost incessantly in deteriorating weather. So, inspections, which were routine elsewhere, had to be skimped. However the Dakota was to become the most useful and necessary aircraft of the whole S.E.A.C. campaign.

Several volumes would be necessary to cover adequately the rôle of the many Dakota units engaged





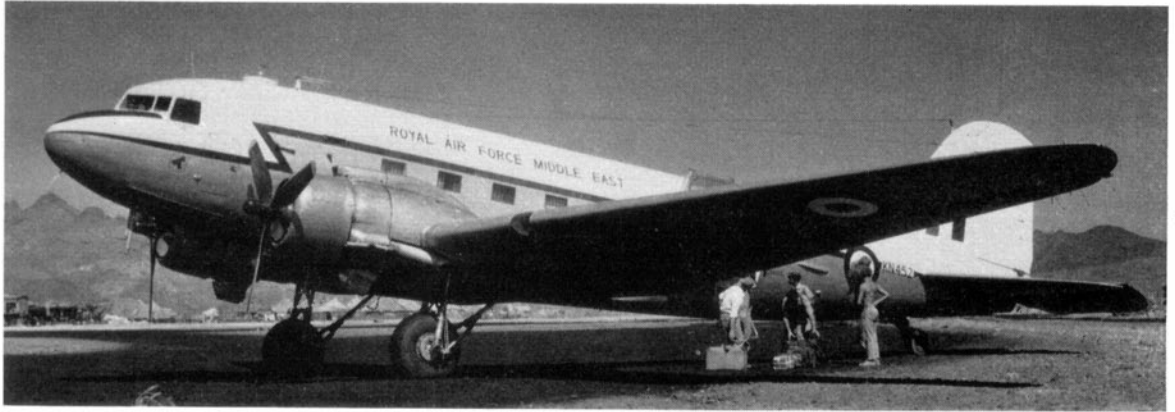
*Dakotas Faith and Hope from the Voive Flight of No. 52 Squadron operated from Bayan Lepas civil airport on the island of Penang during the Malayan conflict which commenced in 1954. Photo shows Dakota Mk. IV KP277 Faith C-47B-35-DK 44-77247 c/n. 16831/33579 at Kuala Lumpur. Note the loud speaker system below the fuselage.*

(Photo: Aviation Photo News)



*Dakota Mk. IV KP208 C-47B-35-DK 44-770087 c/n. 16670/33419 served Headquarters R.A.F. Coastal Command from February 1953 until replaced by a Varsity, and was based at Bovingdon. It later served as V.I.P. aircraft with the Air Attache in New Delhi.*

(Photo: A. Percy)



*Photographed in rugged surroundings at Habalyn airstrip in Aden during 1966 is Dakota Mk. IV KN452 C-47B-30-DK 44-76591 c/n 16175/32923 of the M.E.A.F. Fitted out as a freight aircraft KN452 had previously served with No. 10 Squadron and with the A.O.C. Gibraltar. Many sorties into the Radfan area were flown with this aircraft.*

(Photo: James Muncie)

*Formed at Ibsley after World War II the Glider Pick-up Flight operated with Dakotas modified for glider-tug snatch with Waco Hadrian gliders. The system was demonstrated to the public at the R.A.F. Display, Farnborough in 1950 as seen by the photo. The Hadrian still retains its U.S.A.A.F. serial 274521.*

(Photo: Flight 24659s.)



in the S.E.A.C. campaign under the Supreme Commander, Lord Louis Mountbatten, who also operated a fleet of Dakota aircraft both for personal use (one being a C-47A-60-DL 43-30643 *Mercury*) and for mobile wireless and cypher stations (such as Dakota Mk. IV KN205 *Hermes*).

General Orde Wingate with his Chindits had prepared for *Operation Thursday*, the airlift involving 10,000 men to be dropped behind the Japanese lines in Burma. A total of 80 Waco CG-4A Hadrian gliders were to be towed by Dakotas from Lalaghat in Assam and cast-off in the dark above two jungle clearings code named *Piccadilly* and *Broadway* whilst 12 gliders were towed into *Chowringhee* a new strip named after Calcutta's main street. *White City*, *Blackpool* and *Clydeside* were the familiar names given to other rough strips cut through paddy fields and thick jungle growth. On March 23, a Chindit Brigade was flown into yet another strip called *Aberdeen*. It was over *Aberdeen* that a Dakota was surprised by a Japanese "Oscar" which drove the attack so closely that it collided with the transport's tail unit. In so doing, the fighter shed a wing and plunged to earth. The "Dak" pilot was awarded "one destroyed" and landed his own aircraft safely.

In March 1945, No. 215 Squadron was based at Dhubalia in India and equipped with Liberators. Due to a violent storm which produced winds of over 120 m.p.h. all the aircraft—and most of the station—were destroyed. At this time the S.E.A.C. Commander required still more Dakota squadrons to support the 14th Army in their forthcoming push into Burma, so No. 215 disposed of its bombardiers and air-gunners and was re-equipped with Dakota Mk. IVs. Like many of the S.E.A.C. Dakota units, the squadron carried out tasks all over India and Burma including forward supply to the 14th Army, glider-towing and later took part in *Operation Mastiff*—the repatriation of prisoners-of-war (P.O.W.s) and internees from Siam, Indo-China, Java and Sumatra.

On May 4, 1945, after the Japanese had fled from Rangoon, Group Captain John Grandy in a Dakota Mk. IV (KJ998), flew low over Government House dropping a Union Jack and a Stars and Stripes before setting down at Mingaladon, the first Allied transport aircraft to land at that airfield since February 1942. Dozens of airmen—many of whom had been in solitary confinement for six months, and almost all of whom had suffered cruelty and humiliation at Japanese hands—had now walked to Mingaladon from Rangoon jail, but none asked to return to freedom in the Dakota. During the next few days, Group Captain Grandy returned twice to Mingaladon in another Dakota Mk. IV (KN400), first to bring out R.A.F. P.O.W.s including an Australian, Wing Commander L. V. Hudson, R.A.A.F., the senior P.O.W., and secondly to take V.I.P.s on a tour of Rangoon.

To take over the control and planning of air transport operation on the capacity of which the Burma advance depended, the Combat Cargo Task Force was formed in October 1944 consisting of Nos. 31, 62, 117 and 194 Squadrons of the R.A.F., Nos. 435 and 436 Squadrons R.C.A.F., and Nos. 9, 10 and 12 Squadrons of the U.S.A.A.F., all equipped with Dakotas. When Rangoon was recaptured and Victory in sight, the Allied task force was disbanded.

## SUPPORT OF THE FLEET

During November 1944 the build-up of No. 300 Wing began in the U.K. before being despatched to Australia as an air transport organization devoted exclusively to serving the British Pacific Fleet. Crews were shipped to Dorval, to continue training with No. 45 Group and then to ferry new Dakotas to their bases at Camden, New South Wales; Archerfield, Brisbane; and Parafield, Adelaide; via the long Pacific route. For this flight the aircraft were fitted with overload fuel tanks in the fuselage. The British Pacific Fleet was based at Leyte and many tons of urgent operational stores were delivered without which it might have been impossible to have maintained the offensive. As demands on the air service increased, more aircraft up to a minimum of ninety Dakotas were asked for. The C-in-C, Admiral Sir Bruce Fraser, had V.I.P. Dakotas placed at his disposal. The units involved—Nos. 238 and 243 Squadrons plus No. 1315 Flight—were disbanded by April 1946 with some of the Dakotas stored with No. 389 M.U. at Singapore, while others were returned to the U.K.

## V.I.P. DAKOTAS

Some Dakotas were converted for V.I.P. use, and No. 24 (*Commonwealth*) Squadron throughout its long career with "Daks" flew a selection of personalities which would put any United Nations organization to shame. This included members of the British Royal Family. On June 7, 1945 a Dakota Mk. IV (KN386) piloted by Squadron Leader Hinks flew from Northolt to the Channel Islands with H.M. King George VI and Queen Elizabeth. Another Dakota, a Mk. III (KG770) accompanied the party.

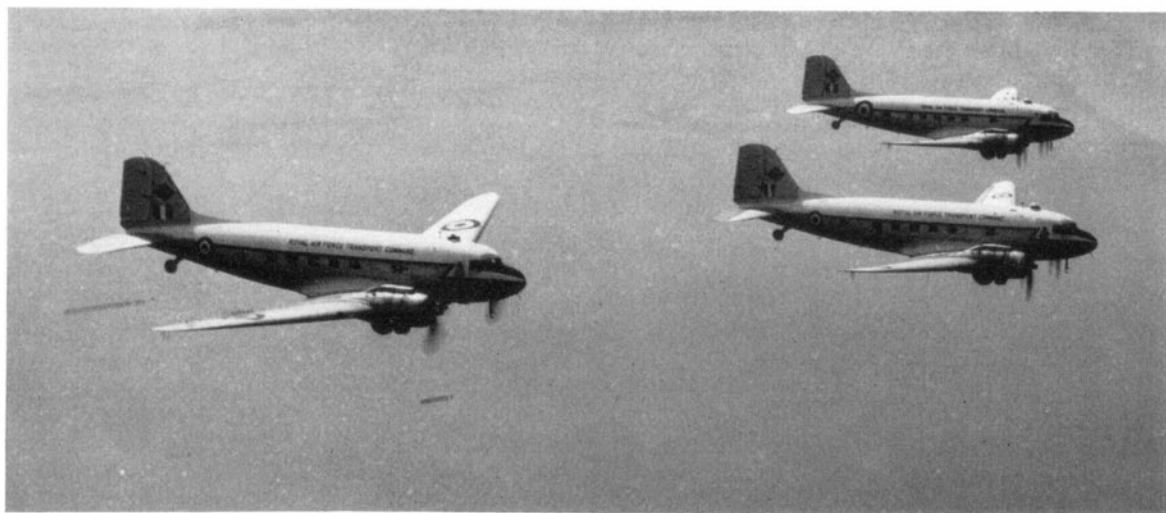
Depending on the situation or the rank of the V.I.P., crews were either seconded on request from Dakota squadrons operating in the same theatre, or personal crews were selected for the task.

Field Marshal Montgomery, during his career, used a number of Dakotas for personal use, the first being exchanged in North Africa for his Boeing B-17E Flying Fortress (41-9082) in August 1943 because the airstrips in the Allied advance into Sicily were often unsuitable for the larger aircraft. This Dakota followed the advance into Europe but was destroyed by enemy action when the Field Marshal was on a visit to troops in January 1945. General Eisenhower, who had supplied both the Dakota and the Flying Fortress, immediately replaced this loss with a C-47B-15-DK (43-48804) which had originally been intended for himself.

Dakota Mk. IV KN628 arrived in the U.K. from the U.S.A. in July 1945, and was flown to an R.A.F. M.U. at Coutraï, in Belgium, to be converted to suit Field Marshal Montgomery's personal requirements. This unit had previously converted Dakotas for Air Chief Marshal Sir Sholto Douglas and Air Marshal Sir Arthur Coningham. In August 1945, KN628 was test flown by Squadron Leader Duncan, personal pilot to the Field Marshal. Its weight—21,846 pounds—was heavier than that of the average Dakota but performance did not suffer as a result. From then on until May 1946 "628" took the Field Marshal and many other notables on numerous historic flights.

Scottish Aviation at Prestwick was one of many contractors working on Dakota overhaul and con-





*Christmas Island Airways was formed to support Operation Grapple and its three Dakota Mk. IV aircraft are depicted on their last flight as a unit to No. 389 MU Singapore for disposal. The aircraft are KN434 "A" Polynesian Princess KN598 "B" Coral Queen; and KJ945 "C" Island Romance.*  
(Photo: B. C. Whittaker)

version programmes, and they converted many Dakotas to V.I.P. standard; these included two for the Royal Hellenic Air Force—KN542 for H.M. the King of Greece, and KN575 for General Margartin, Chief of Staff. Most theatre commanders had their own Dakotas—Air Marshal Sir Charles Medhurst used KN377 in the Middle East, Lord Tedder used KJ994 and TJ170 whilst General Gardner used KP230 in the Far East—most of these modified to the specification of the user.

Early in 1961, two Dakotas were chosen and operated by the Queen's Flight in the Nepalese sector of the Asian tour undertaken by H.M. The Queen and the Duke of Edinburgh. They were considered to be the most suitable and proven type for the conditions involved. Katmandu, which was on the Royal route, was the only airfield in the country with an all-weather runway, 800 yards long, and about 4,000 feet above sea-level. The two Dakotas employed were KN645, which was used by Viscount Montgomery after the war, and KN452 which had been used by the A.O.C. Malta.

#### **ALL-WEATHER AIR SERVICE**

No. 24 (*Commonwealth*) Squadron initiated an all-weather air service from Blackbushe to Prestwick with its Dakotas on September 16, 1945—a service which operated for a total of 12 months during which out of 728 flights planned, 726 were carried out—the two omissions being due to severe turbulent conditions and airfield limitations, although FIDO fog dispersal equipment which was installed at Blackbushe was used on several occasions. This high performance resulted in an operational efficiency of 99.73 per cent.

#### **PLAINFARE AND FIREDOG**

The Berlin Airlift began in June 1948. It was initiated to defeat the blockade which had been gradually imposed by the U.S.S.R. upon the three Western sectors of the city. For political purposes, the Russians had suspended all traffic by road, rail and inland waterway between Berlin and the Western Zone of

Germany, which were controlled by France, Great Britain and the U.S.A.

For *Operation Plainfare*, disbanded squadrons were reformed and retired aircraft resuscitated from the Maintenance Units. Operations began with a Dakota which took off from Wunstorf at 06.45 on June 28, 1948, with a load of supplies to Berlin. Sorties continued from Fassberg on July 19 when Dakotas from Nos. 18, 53, 62 and 77 Squadrons, which had been based at Waterbeach, and Nos. 10, 27, 30 and 46 Squadrons, ex-Oakington, flew 80 sorties to Berlin carrying over 250 tons of supplies.

Other units had detachments on the airlift including No. 24 (*Commonwealth*) Squadron who had support from Dakota crews of the South African, Royal Australian and Royal New Zealand Air Force. On September 23, 1949, the last Dakota—KN652—took off from Lubeck at 18.30 arriving at Gatow 52 minutes later and completing another phase in the greatest humanitarian supply operation in the history of aviation.

June 1948 was also the beginning of operations in support of security forces against terrorists in Malaya—*Operation Firedog*—in which Dakotas were used for supply dropping, air sea rescue, marker dropping for the Avro Lincoln bombers of the R.A.A.F., while one unit—No. 52 Squadron—fought a psychological warfare campaign with its "Voice" Dakotas broadcasting to the communist terrorists. This squadron operated *Faith* (KP277); *Hope* (KJ955); and *Charity* (KJ810). Even after the introduction of the Vickers-Armstrong Valetta in the Far East, this unit retained the Dakota in this unique rôle. In the U.K., No. 240 Operational Conversion Unit (O.C.U.) retained a flight of Dakotas to provide the trained crews. It was 12 years before this emergency campaign ended.

#### **NUCLEAR TEST SUPPORT**

"Christmas Island Airways" was formed with three Transport Command Dakotas at Dishforth in 1956 and allotted to *Operation Grapple* for the series of nuclear weapon tests in the Pacific. These Dakotas of

No. 1325 Flight came under No. 160 Wing and were used for communications between Christmas Island and the target island Malden about 400 miles south plus providing excellent grandstands for viewing the tests.

Initially, the aircraft were ferried from the U.K.—via the U.S.A. and the Pacific—fitted with long range fuel tanks in the fuselage. On completion of their task the aircraft were ferried to R.A.F. Seletar on May 23, 1960. The aircraft carried full Transport Command livery and were KN434 "A" (*Polynesian Princess*); KN598 "B" (*Coral Queen*); and KJ945 "C" (*Island Romance*).

### R.C.A.F. AND UNITED NATIONS

The Dakota first went into regular Canadian service with the R.C.A.F. on March 29, 1943 and, as the war progressed, an ever increasing number was taken on strength and units were formed which flew them exclusively. No fewer than 131 of the 200-odd Dakotas used by the R.C.A.F. were ex-R.A.F., retaining their original serials in most cases.

The Canadian Forces Air Navigation School based at Winnipeg had still (in late 1970) 22 on strength, and up to 1958 the R.A.F. were training navigators with the R.C.A.F. No. 2 Air Observer School.

During World War II the R.C.A.F. Dakotas flew for eight months over the Burma "Hump" with Nos. 435 and 436 Squadrons, while No. 437 Squadron was formed in the U.K. at Blakehill Farm in 1944 and took part in the Arnhem operation towing gliders and dropping supplies. Since the war, Dakotas have carried paratroops, towed troop-laden gliders for the airborne forces school in Rivers, Manitoba, air-lifted passengers and freight, served as air ambulances, navigation trainers and undertaken S.A.R. (Search and Rescue) duties. They have also made good platforms for photo surveys. Equipped with ski-wheel landing gear Dakotas of the R.C.A.F. Air Transport Command have been employed as cargo carriers into



*Dakota Mk. IV KJ839 C-47B-1-DK 43-48362 c/n 14178/25623 first flew with Armstrong Siddeley Mamba engines on August 27, 1949. It had previously served with No. 147 Squadron, 1382 TCU and 242 OCU. In April 1958 it was SOC and later became G-APNK.*  
(Photo: Air-Britain Photo Library)

*Along with its two civil counterparts, Dakota Mk. IV KJ829 C-47B-1-DK 43-48352 c/n 14168/25613 is reputed to have tested every model of Rolls-Royce Dart engine. First flew at Hucknall March 15, 1950 and in 1956 was purchased by Rolls-Royce to become G-37-2 and finally G-AOXL.*

(Photo: Rolls-Royce KN106)



snow and ice covered areas along the Mid-Canada Line, the early warning network which roughly follows the fifty-fifth parallel.

From 1946 to 1966 R.C.A.F. Dakotas amassed a total of close to one million miles in the air, and the aircraft still on inventory are adding a respectable 62,000 flying hours annually. As a tribute to the type, KN451 was retired sometime ago and placed in the R.C.A.F. Museum.

The Dakota has been a workhorse for the United Nations, and has been in service with U.N. missions in Indonesia, Greece, Palestine, India, Pakistan, in the Gaza Strip and Sinai Desert and in the Congo, not to mention the Lebanon. All these missions have used at least one aircraft—the Congo mission had ten in service at one time. In all cases the aircraft has carried passengers and freight and has also done duties as an ambulance and observation aircraft. The R.C.A.F., U.S. Air Force and Italian Air Force and other countries provided the aircraft and crews to the United Nations, but the majority of the Dakotas came from the R.C.A.F.

No. 115 Air Transport Unit (U.N) is based in El Arish, Egypt and on June 17, 1958 a Dakota Mk. IV (KN666) was forced by United Arab Republic MiG-15 jets to land at Abu Suer, allegedly for not flying the established air corridor. In July 1964, the Dakotas were being replaced by the R.C.A.F. de Havilland (Canada) Caribou with several of the U.N. Missions.

### POST-WAR CONVERSIONS

A Dakota Mk. IV (KJ839) ex-R.A.F. Transport Command, with low airframe hours and unfurnished, was selected by Armstrong Siddeley to have its Pratt & Whitney Twin Wasps replaced by the company's Mamba turboprops. Scottish Aviation were largely concerned with the modification work and first flight was at Bitteswell on August 27, 1949. The aircraft was later re-engined with the Mamba 3s and flew many hours as a flying test-bed for engine research before the Twin Wasps were re-installed and the aircraft sold in 1958.

On the first day of June 1949, a Dakota Mk. IV (KJ829) arrived at Hucknall for Rolls-Royce to

*Dakota Mk. III TS423 C-47A-75-DL 42-100884 c/n 19347 was acquired by Ferranti in 1949 with only 766 hours on the airframe. During 1951 the existing standard nose was extensively modified to accept a gimbal supported and hydraulically controlled gun turret as this rare photo shows.*  
(Photo: Ferranti TFV1)





In 1952 the nose profile of TS423 was again altered to accept a bullet shaped structure to carry an Airpass radar. The "Hen Coop" above the cockpit was designed to carry a forward looking camera and also used for visual observation. (Photo: Ferranti 158D)

replace the Twin Wasps with the Dart turboprops. On March 15, 1950 "829" made its first flight and became a flying test-bed for future models of the successful Dart, and Rolls-Royce eventually purchased the aircraft on August 22, 1956. The Dakota continued to fly with Darts installed until November 1961, by which time Rolls-Royce had purchased two civil Dakotas for conversion.

A Dakota Mk. III (TS423) was acquired by the Ferranti Flying Unit based at Turnhouse Airport, Edinburgh on August 15, 1949, with only 766 hours on the airframe. Under a Ministry of Aviation contract "423" was heavily modified and used on distance measuring trials. In 1951 the nose was modified and extended to accept a gimbal-supported and hydraulically-controlled gun turret. The nose profile was again altered in 1952 to accept a bullet-shaped structure to carry a Ferranti Airpass radar, a shape which was retained throughout subsequent modifications to the aircraft.

Approximately 1,300 hours were flown in the rôles mentioned before disposal to Short Brothers & Harland Limited at West Malling in 1967. In November 1968, it was overhauled by Scottish Aviation before being acquired by Marshalls of Cambridge Limited on May 14, 1969 for use on a MinTech contract with the Royal Aircraft Establishment, West Freugh, near Stranraer, Scotland.

During 1954 a contract was awarded to Field Aircraft Services at Tollerton, near Nottingham, to refurbish 50 surplus R.A.F. Dakotas at U.S. expense and return them to the U.S.A.F. as a gift. These were delivered in U.S.A.F. markings and were re-allocated within the framework of the N.A.T.O. air forces—a kind of reverse Lend-lease.

Of the 2,000-odd Dakotas used by the R.A.F. many are still logging the hours with air forces throughout the world; others are in civil guise possibly flying over territory they knew during World War II—the U.S.A.F. and U.S. Navy still have the C-47 and C-117 on inventory—all descendants of the ubiquitous DC-3.

Among the four weapons listed by General Eisenhower *which did most to win the war*, one was the jeep and another was the Douglas Dakota, and to quote an unnamed pilot: "You might wreck a Dak but you'll never wear it out."

**ROYAL AIR FORCE**  
**Douglas DC-3 and Dakota Serials**

<b>Douglas DC-3</b>	LR230 to LR235	6
	MA925 and MA943	2
<b>Dakota Mk. I*</b>	FD768 to FD818	51
	HK983 built up from spares	1
	HK993	1
<b>Dakota Mk. II**</b>	FJ709 to FJ712	4
	HK867	1
	MA928 and MA929	2
<b>Dakota Mk. III</b>	TJ167 and TJ170	2
	FD819 to FD967	149
	FL503 to FL652	150
	FZ548 to FZ698	151
	KG310 to KG809	500
	TS422 to TS427	6
	TS431 to TS436	6
<b>Dakota Mk. IV</b>	KJ801 to KJ999	199
	KK100 to KK220	121
	KN200 to KN701	502
	KP208 to KP279	72
	TP181 and TP187	2
	<b>Total:</b>	<b>1,928</b>

**NOTES:**

\*FG857 listed as Dakota Mk. I; but no records.

\*\*TJ168 and TJ169 allocated but not delivered.

**R.A.F. SQUADRONS USING THE DAKOTA**

Sqn. No.	Name	Code	Example	Theatre of Operation
10		ZA	KN516 ZA-M	SEAC—UK —Berlin Airlift
18	"Burma"		KN217	U.K.—Berlin Airlift
21			KP250 "G"	Middle East
24	"Commonwealth"	NQ	KJ932 NQ-P	U.K.—Berlin. Airlift
27			KN361 "D"	U.K.—Berlin Airlift
30		JN	KN498 JN-J	U.K.—Berlin Airlift
31			FL540 "A"	S.E.A.C.
36		RW		U.K.
45			KN404	Far East
46	"Uganda"	XK	KJ801 XK-Y	U.K.—Berlin Airlift
48		12	KG401 12-AP	U.K.—Far East
52			KJ947 "Y"	S.E.A.C.— Malaya
53		PU	KN286 PU-A	U.K.—Berlin Airlift
62	"Northampton"		KG551	S.E.A.C.— Berlin Airlift
70			KP226	Middle East
76		MP	KN559 MP-S	S.E.A.C.
77	"Lancaster"	DV	KG357 DV-S	S.E.A.C.— Berlin Airlift



78	"Preston"	EY	KJ877 EY-Z	Middle East
82	"United Provinces"		KN515 "N"	Middle East
96			KP230	Middle East —S.E.A.C.
110	"Hyderabad"		KJ950 "Y"	Far East
113			KJ939	Middle East —U.K.
114	"Hong Kong"		KN331	Middle East
117			KK120 "C"	Middle East —S.E.A.C.
138		AC	KN499 AC-AW	U.K.
147		CMV	KG748 CMV-90	U.K.
167	"Gold Coast"		FZ696	U.K.
172				U.K.
173				Middle East
187			KP215	U.K.— S.E.A.C.
194			KG576 "P"	S.E.A.C.
204			KJ914	U.K.— Middle East
206		TJ	KN701 TJ-C	Azores
209			KP277	Malaya
215			KN223 "L"	S.E.A.C.
216			KJ906 "X"	Middle East —S.E.A.C.
231			KP276	Canada
232				S.E.A.C.
233		5T	KG313 5T-UM	U.K.— S.E.A.C.
238			KN540 VM-YDP	S.E.A.C.— Australia— U.K.
241				U.K.
243			KN149 VM-YAL	Australia
267	"Pegasus"		KN512 AKW	Middle East —S.E.A.C.
271		YS	KJ866 YS-X	U.K.— Berlin Airlift
353			KG492	S.E.A.C.
357				S.E.A.C.
510				U.K.
511			FD945	U.K.
512		HC	KN499 HC-AW	U.K.— Middle East
525		WF	KK151 WF-B	U.K.
575		19	FZ695 19-Z	U.K.— Palestine
620			KJ939	U.K.
657		TS	KN840 TS-L	U.K.



Typical post-war hangar scene in the U.K. when hundreds of surplus R.A.F. Dakotas were converted for civil use. Dakota Mk. IV KN509 C-47B-30-DK 44-76710 c/n 16294/33042 is shown being converted to G-AMYX for Silver City.  
(Photo: Eric Taylor, Air-Britain)

Several civil Dakotas were impressed into temporary military service during the 1950s. Seen at Blackbushe is XF619 ex G-AMYX of Silver City. During World War II this aircraft as KN509 served with No. 46 Squadron as XK-Q.  
(Photo: John Ellis)



ROYAL CANADIAN AIR FORCE			
408	"Goose"		Canada
412	"Falcon"	AO	KJ936 AO-H Canada
414	"Imperial"	AQ	KG423 AQ-K Canada
422		DG	KG615 DG-615 Canada
426	"Thunderbird"		Canada
435	"Edmonton"	BW	KP227 BW-G S.E.A.C. U.K.— Canada
436	"Montreal"	FM	KJ857 "I" Z2-DQ S.E.A.C.— Canada
437	"Husky"	Z2	FZ669 72-DQ U.K.— Canada

Note: Many squadrons had codes allocated but rarely or never used them. The R.C.A.F. squadrons listed are representative only.

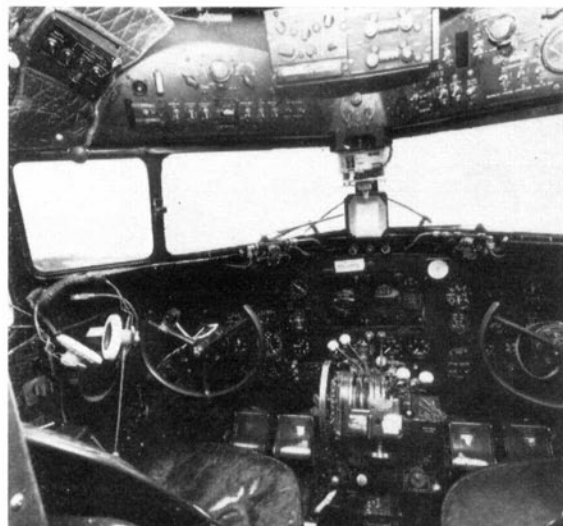
GROUND INSTRUCTIONAL AIRCRAFT			
3493M		U.S. 8th Air Force—No. 1 Parachute Training School (P.T.S.) Ringway 1943	
3494M		U.S. 8th Air Force—No. 1 P.T.S. Ringway 1943	
4838M	42-22422	Mk. III allocated from Prestwick	1944
4844M	42-24068	Mk. III No. 107 O.T.U. from U.S.A.	
4957M	KG593		
4981M	KG639		
4989M	KG527		
5254M	KG796	No. 105 O.T.U. Edzell.	
5351M	FD826	No. 512 Squadron, later No. 1 P.T.S. Brize Norton.	
5566M	KG590		
5567M	KG418	Cancelled.	
5742M	KG214	No. 1336 H.C.U. Welford.	
5749M	FL546	No. 1381 T.C.U. Bramcote.	
5949M	FD772	Old Sarum.	
6252M	TJ167	C-53 converted February 3, 1947 for 5 M.U.	
6731M	KP231	St. Athan 1950.	

## ACKNOWLEDGEMENTS

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Series Editor: CHARLES W. CAIN

Cockpit of Dakota Mk. IV KN645 which has changed very little from the DC-3 which was first flown in 1935 at Santa Monica, California. The experts will no doubt recognise the installation of U.H.F. equipment. The PTR.175 dialling system is top centre of the photo.  
(Photo: Flight 70/2725)





The last operational flight of an R.A.F. Dakota took place on April 4, 1970 when Dakota Mk. IV KN645 C-47B-35-DK 44-77003 c/n 16587/33335 from Headquarters AFNE, Oslo, was flown from Northolt to Kemble. Pilot was Squadron Leader Neil Franks. Aircraft is in storage with No. 5 MU pending display in the R.A.F. Museum at Hendon. (Photo: Flight 70/2738)

#### DOUGLAS DC-3 AND DAKOTA SPECIFICATION

Model	DC-3	DC-3	Dakota Mk. I	Dakota Mk. II
Engines/Manufacturer/Model	Wright Cyclone GR-1820-G102	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-92
Take-off horsepower per engine	1,200	1,200	1,200	1,200
Normal cruise speed—(miles per hour)	192	192	185	185
Operating altitude—(feet)	11,200	11,200	11,200	11,200
Range at maximum fuel—(nautical miles)	2,150	2,150	2,125	2,125
Maximum payload—(pounds)	6,600	6,600	9,450	7,711
Maximum loaded—(pounds)	24,000	24,000	31,000	24,000
Cargo load—(pounds)			7,500	
Passenger/troops	21	21	28	28
Wing span	95 ft. 0 in.	95 ft. 0 in.	95 ft. 0 in.	95 ft. 0 in.
Length	64 ft. 6 in.	64 ft. 6 in.	64 ft. 6 in.	64 ft. 6 in.
Height	16 ft. 4 in.	16 ft. 4 in.	16 ft. 4 in.	16 ft. 4 in.
Wing area	987 sq. ft.	987 sq. ft.	987 sq. ft.	987 sq. ft.
U.S.A.F. Model No./Designation	C-49 and C-50 variants	C-52 and variants	C-47-DL	C-53
Fuel load—(Imperial gallons)	685	685	670	670
Fuel type—(octane except Dart/Mamba)	100	100	100	100
Weight—Empty—(pounds)	16,289	16,289	16,865	16,289
Loaded—(pounds)	24,000	24,000	25,200	24,000
Maximum—(pounds)			31,000	
<b>Model</b>	<b>Dakota Mk. III</b>	<b>Dakota Mk. IV</b>	<b>Dart Dakota</b>	<b>Mamba Dakota</b>
Engines/Manufacturer/Model	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-90B	Rolls-Royce Dart 504	Armstrong-Siddeley Mamba 3S (Series 2)
Take-off horsepower per engine	1,200	1,200	1,400	1,425
Normal cruise speed—(miles per hour)	185	185	200 (true)	200 (true)
Operating altitude—(feet)	11,200	11,200	15,000	15,000
Range at maximum—(nautical miles)	2,125	2,125	—	875
Maximum payload—(pounds)	9,450	9,450	—	5,200
Maximum loaded—(pounds)	31,000	31,000	28,000	26,700
Cargo load—(pounds)	7,500	7,500		
Passenger/troops	28	28	Cargo only	Cargo only
Wing span	95 ft. 0 in.	95 ft. 0 in.	95 ft. 0 in.	95 ft. 0 in.
Length	64 ft. 6 in.	64 ft. 6 in.	64 ft. 6 in.	64 ft. 6 in.
Height	16 ft. 11 in.	16 ft. 11 in.	16 ft. 11 in.	16 ft. 11 in.
Wing area	987 sq. ft.	987 sq. ft.	987 sq. ft.	987 sq. ft.
U.S.A.F. Model No./Designation	C-47A	C-47B	C-47B	C-47B
Fuel load—(Imperial gallons)	670	670	673	670
Fuel type—(octane except Dart/Mamba)	100	100	Avtur/Avtag	Avtur/Avtag
Weight—Empty—(pounds)	16,865	16,865	—	15,865
Loaded—(pounds)	25,200	25,200	—	26,700
Maximum—(pounds)	31,000	31,000	—	—



A lasting and fitting tribute to the "Red Berets" is Dakota Mk. IV KP208 which was presented to the Airborne Forces Museum at Aldershot on May 27, 1970 "Airborne Forces Day". It was flown from storage at No. 5 MU Kemble to Odiham on May 18, 1970 and then taken by road. Total flying time 4164 hours 5 minutes. (Photo: The Author)