



# Spotlight

## Westland Lysander

# FlyPast

Scrutinizes the history of...



# The Westland Lysander

**Above**  
Westland Lysander  
II TV-B of 45  
Squadron on a  
training exercise.

**C**ertainly one of the world's most immediately identifiable aircraft, the Westland Lysander was originally designed for army co-operation duties. Although its career in this role was short, it went on to score numerous successes in other areas.

Lysanders were superb observation platforms and were responsible for assisting in the rescue of many downed pilots in the sea during the early stages of World War Two. They were also used for training purposes, in air gunnery schools and for target towing. Their most famous role was of a more secretive

nature – quietly landing in enemy territory at night, sometimes to pick up agents.

The aircraft's short take-off and landing ability, plus the lack of engine noise generated from its Bristol Mercury radial, made it ideal for such clandestine activities.

### Testing times

The Lysander was designed by Arthur Davenport and Teddy Petter in response to an April 1935 request for a two-seat army co-operation aircraft to replace the ageing Hawker Audax. The Westland design was selected over three rivals, from Avro, Bristol and Hawker.

In June 1936, the P.8 prototype, K6127, began taxiing trials at Westland's Yeovil base, with Harald Penrose at the controls. It took to the air for the first time on June 15.

Following further manufacturer trials, K6127 was delivered to the A&AEE (Aeroplane & Armament Experimental Establishment) at Martlesham Heath, and then on to Farnborough. The public saw the new machine at Hendon on June 28, 1937.

The P.8 was then fitted with armament for further testing. The Lysander had the unusual feature of guns mounted on the top of the large wheel spats. It also had

removable 'stub wings' on the spats to which bombs could be attached.

The first production aircraft entered service in May 1938. Westland eventually built three main versions – the Mk.I, which was powered by an 890hp (663kW) Mercury XII radial, the 905hp Perseus-engined Mk.II, and the definitive Mk.III, which had various versions of the Bristol powerplant.

Although the British manufacturer ceased production in 1942, around 225 further Mk.IIs and IIIs were built by the National Steel Car corporation (and subsequently by Victory Aircraft) in Canada.

### War machine

With its versatility and unusual ability to land and take off from short or hastily prepared strips, the Lysander proved both useful and popular, with 30 RAF and Commonwealth squadrons using the type in World War Two. It made its combat debut in France during 1940, where it performed ground attack and supply drops. On occasion, it was even used to engage enemy aircraft – a Heinkel He 111 was claimed by one crew – but with mounting losses, air-to-air combat was certainly not among its strengths.



**Left**  
Lysander I R2642 served with 208 Squadron in North Africa during 1942.  
BOTH KEY

“It made its combat debut in France during 1940, where it performed ground attack and supply drops, and occasionally even engaged enemy aircraft”

Units subsequently operated in North Africa, Burma, Palestine, India and Greece. Even when withdrawn from frontline operations, Lysanders remained in use in several secondary roles.

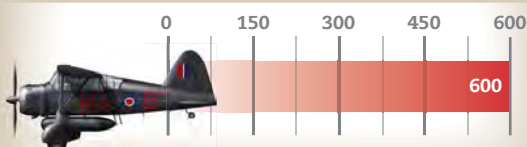
Special duties behind enemy lines were carried out in both Europe and the Middle East. The aircraft were usually painted black and could be

fitted with a large under-fuselage fuel tank, which more than doubled the normal range.

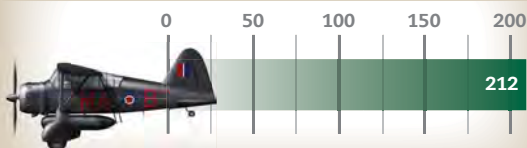
The Shuttleworth Collection's Lysander III (G-AZWT), the only example currently flying in the UK, is painted to represent V9367 of 161 Squadron, and flies as a tribute to all those involved in wartime special 'ops'. ●

### Westland Lysander

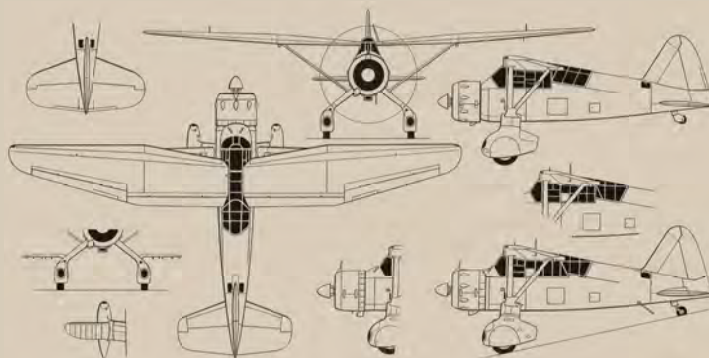
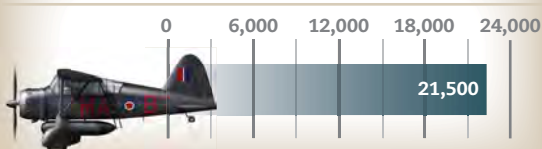
#### AT A GLANCE: RANGE (miles)



#### AT A GLANCE: SPEED (mph)



#### AT A GLANCE: CEILING (feet)



- Construction:** A total of 1,786 Lysanders were built.
- First Flight:** The prototype first flew on June 15, 1936.
- Powerplant:** One 870hp (649kW) Bristol Mercury XX radial engine.
- Dimension:** Span 50ft (15.2m). Length 30ft 6in. Height 14ft 6in. Wing area 260sq ft (24.2m<sup>2</sup>).
- Weight:** Empty 4,365lb (1,984kg). Loaded 6,330lb.
- Performance:** Max speed 212mph (341km/h). Service ceiling 21,500ft (6,550m). Climb to 10,000ft in 8 mins. Range 600 miles (966km) or 1,400 miles with additional fuel tank.
- Armament:** Two forward firing 0.303in Browning machine guns in wheel fairings and two 0.303in Lewis guns for observer. Four 20lb bombs could be carried under rear fuselage, and up to 500lb of bombs under wings.
- Crew:** One or two – pilot and observer/passenger.

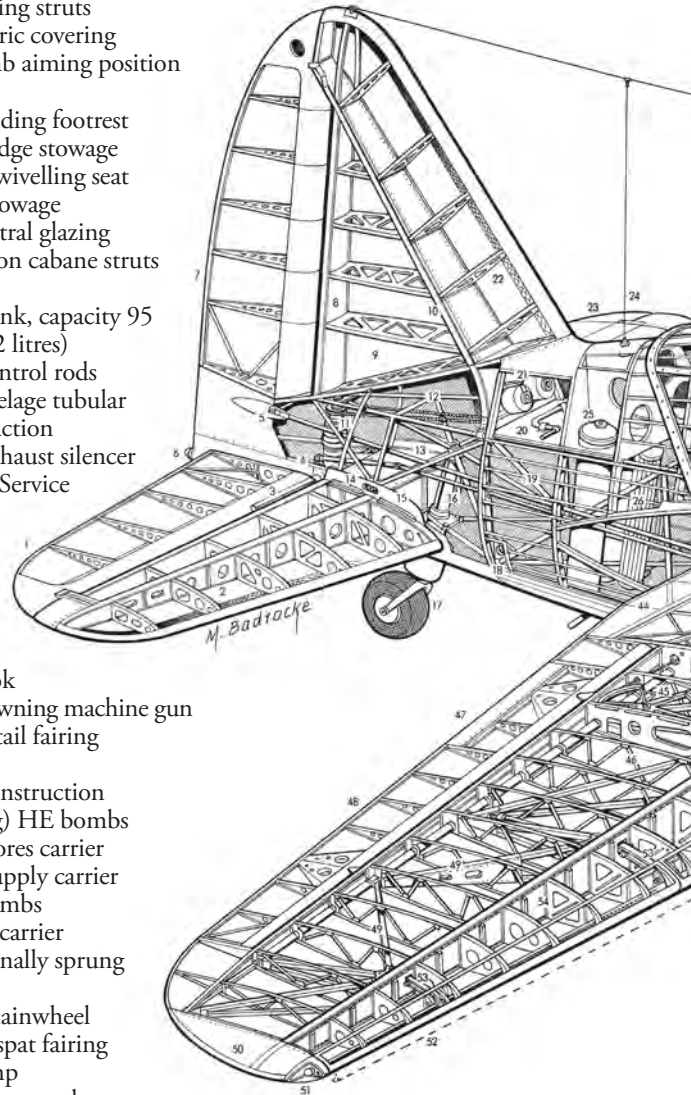
**Note:** performance and weights varied according to role and configuration.

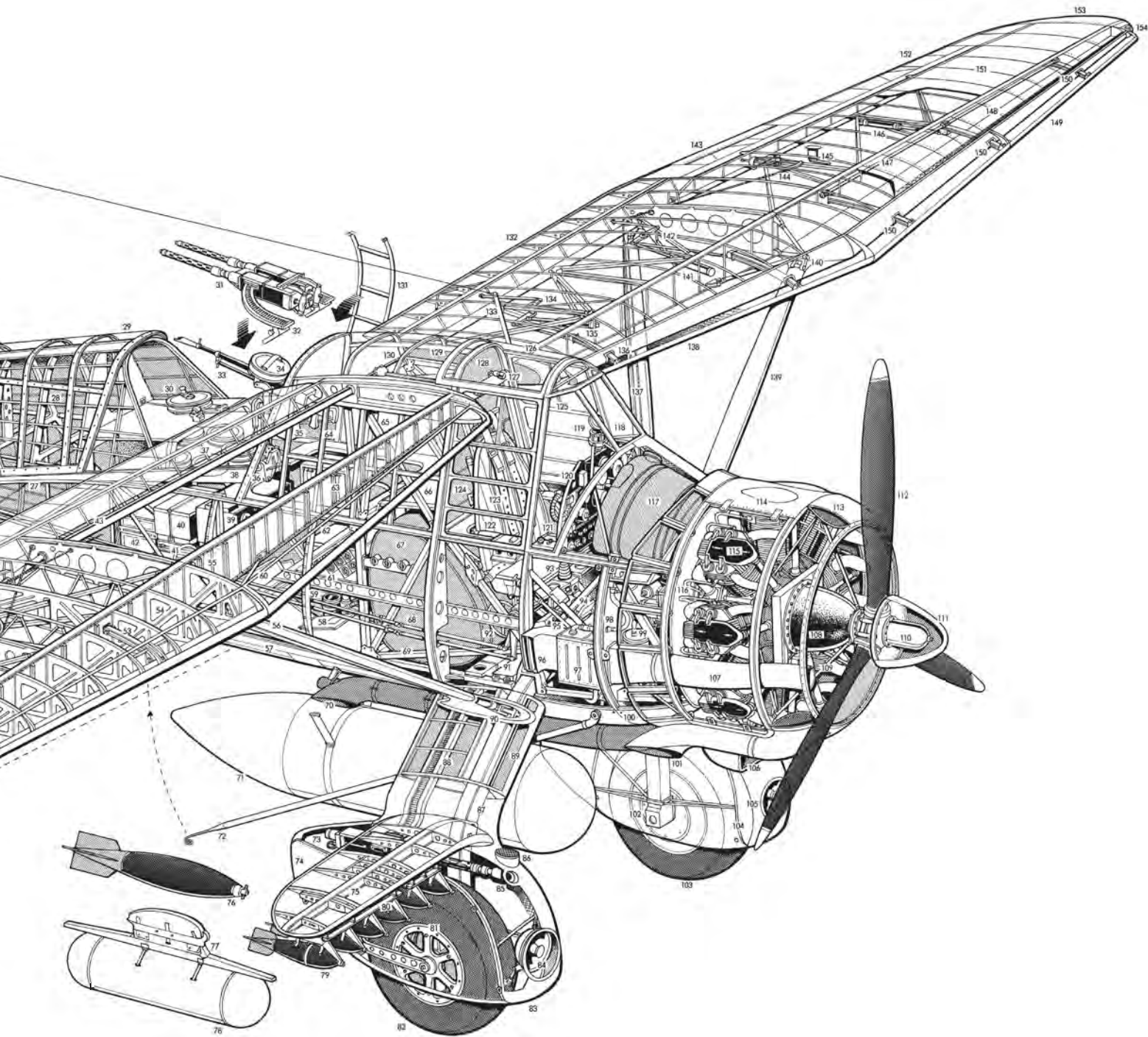


# Spotlight

## Westland Lysander III

- 1 Fabric-covered elevator construction
- 2 Starboard tailplane construction
- 3 Elevator torque shaft
- 4 Elevator hinge control
- 5 Rudder operating lever
- 6 Tail navigation light
- 7 Fabric-covered rudder construction
- 8 Sternpost
- 9 Tailfin construction
- 10 Sloping fin spar
- 11 All-moving tailplane trim screw jack
- 12 Rear fuselage tubular steel framework
- 13 Tailplane centre-section carry-through
- 14 Tailplane pivot fixing
- 15 Sealing plate
- 16 Tailwheel leg strut
- 17 Castoring tailwheel
- 18 Tail lifting point
- 19 Fuselage frame-and-stringer side panelling
- 20 Starter handle stowage
- 21 Ballast weights
- 22 Fin leading edge ribs
- 23 Port elevator
- 24 Aerial lead-in
- 25 Flare launch tube
- 26 Control locking equipment stowage
- 27 Starboard side fuselage access panel
- 28 Fuselage turtle-deck construction
- 29 Observer's canopy cover, open
- 30 Trailing aerial winch
- 31 Twin Browning 0.303in (7.7mm) machine guns (Lysander IIIa)
- 32 Ammunition feed chutes
- 33 Vickers 'K' gun (early Lysander III)
- 34 Ammunition drum
- 35 Cartridge case collector bag
- 36 Rocking gun mounting pedestal
- 37 Spare ammunition drums
- 38 Rear canopy rail
- 39 Radio equipment
- 40 Radio power supply unit
- 41 'Push in' boarding step
- 42 Battery
- 43 Wing tubular rear spar
- 44 Starboard flap
- 45 Aileron control mechanism
- 46 Wing lattice rib construction
- 47 Aileron tab
- 48 Starboard aileron
- 49 Inter-spar diagonal bracing struts
- 50 Wing tip fairing
- 51 Starboard navigation light
- 52 Leading edge slat, open position
- 53 Slat guide rails
- 54 Leading edge rib construction
- 55 Double tapered front spar
- 56 Starboard wing struts
- 57 Fuselage fabric covering
- 58 Ventral bomb aiming position
- 59 Drift sight
- 60 Gunner's folding footrest
- 61 Signal cartridge stowage
- 62 Observer's swivelling seat
- 63 Parachute stowage
- 64 Cockpit central glazing
- 65 Centre section cabane struts
- 66 Chart table
- 67 Main fuel tank, capacity 95 imp gal (432 litres)
- 68 Tailplane control rods
- 69 Forward fuselage tubular steel construction
- 70 Extended exhaust silencer (Special Air Service aircraft)
- 71 Long range fuel tank, capacity 150 imp gal
- 72 Retractable message hook
- 73 0.303in Browning machine gun
- 74 Wheel spat tail fairing access panel
- 75 Sub wing construction
- 76 120lb (54kg) HE bombs
- 77 Universal stores carrier
- 78 Parachute supply carrier
- 79 20lb HE bombs
- 80 Light stores carrier
- 81 Dowty internally sprung wheel hub
- 82 Starboard mainwheel
- 83 Mainwheel spat fairing
- 84 Landing lamp
- 85 Machine gun muzzle
- 86 Access step
- 87 One-piece main undercarriage leg strut
- 88 Ammunition feed chutes
- 89 Leg strut fairing
- 90 Wing bracing strut attachment joint
- 91 Ammunition boxes, 500 rounds per gun
- 92 Pilot's seat adjusting handwheel
- 93 Control column
- 94 Rudder pedals
- 95 Cockpit heater duct
- 96 Oil cooler exhaust louvres
- 97 Oil cooler
- 98 Engine bay fireproof bulkhead
- 99 Engine accessory equipment bay
- 100 Cowling air flaps
- 101 Exhaust pipe (Lysander III)
- 102 Port main undercarriage leg strut
- 103 Port mainwheel
- 104 Wheel spat fairing
- 105 Port landing lamp
- 106 Carburettor air intake
- 107 Oil cooler air duct
- 108 Propeller reduction gearbox
- 109 Cowling mounting struts
- 110 Propeller hub pitch change mechanism
- 111 Spinner
- 112 de Havilland three-bladed variable pitch propeller
- 113 Exhaust collector ring
- 114 Detachable engine cowling panels
- 115 Bristol Mercury XXX nine-cylinder radial engine





- 116 Engine mounting ring
- 117 Oil tank
- 118 Windscreen panels
- 119 Reflector sight
- 120 Back of instrument panel
- 121 Control column handgrip
- 122 Pilot's seat
- 123 Safety harness
- 124 Crash axe stowage
- 125 Vertically sliding slide window panels
- 126 Sliding cockpit roof hatch
- 127 Instrument panel light
- 128 Seat back armoured bulkhead
- 129 Centre section roof glazing

- 130 Wing spar/cabane strut attachment joint
- 131 Port side fixed boarding ladder (IIIA SAS aircraft only)
- 132 Fabric covered flap construction
- 133 Aerial mast
- 134 Flap/slat interconnection
- 135 Flap hydraulic jack
- 136 Slat guide rail
- 137 Aileron control tie rod (within rear strut)
- 138 Inboard leading edge slat open
- 139 Port wing bracing struts
- 140 Strut attachment joint
- 141 Slat pneumatic damper

- 142 Flap/slat outboard interconnection
- 143 Aileron tab
- 144 Aileron control quadrant
- 145 Ventral pitot tube
- 146 Outboard slat pneumatic damper
- 147 Slat torque shaft
- 148 Leading edge aluminium skin panelling
- 149 Outboard slat, open position
- 150 Slat guide rails
- 151 Wing panel fabric-covering
- 152 Port fabric-covered aileron
- 153 Wingtip fairing
- 154 Port navigation light



**Spotlight**

**Westland  
Lysander**

# Outdated **BUT NOT** Outclassed

**Graham Pitchfork** charts the careers of three of the Lysander's leading airmen





**W**ith Italy's entry into the war looking more and more likely, 208 Squadron deployed to its war station at Qasaba in Egypt on June 1, 1940. There it came under the control of the 7th Armoured Division, and its Lysander Is immediately began flying patrols along the frontier with Libya.

In 1939, James Wilson, a regular RAF officer, was second-in-command of 208 Squadron, based at Heliopolis in Egypt. A highly mobile unit, almost

all its flying effort was devoted to tactical, artillery and photographic reconnaissance sorties in support of the army.

During the tense period in late 1939, it conducted numerous exercises from forward landing grounds in the Western Desert. After the outbreak of war with Germany in September the squadron increased its deployments into the desert, often based at Mersa Matruh.

When Italy declared war on June 10, 1940 Wilson took four aircraft

**Left**  
*Sqn Ldr James Wilson, OC 208 Squadron.*

**Below**  
*A Lysander of 208 Squadron with the pyramids as a backdrop.*



**SPOT FACT** The Chindits of the British Indian Army operated Lysanders in the Burma campaign



**Right**  
The shadow of a 208 Squadron Lysander monitoring the trek of thousands of Italian prisoners of war.

**Below**  
A Lysander of 208 Squadron operating from a captured Italian airfield in Libya.

“The Italian advance was halted in early December and General Wavell – Commander-in-Chief Middle East – prepared to counterattack. Wilson took photographs to identify Italian troop and transport concentrations...”

forward to Sidi Barrani, close to the Libyan border. Daily recce and photo sorties were flown to monitor movements on the large Italian airfield at Fort Capuzzo and aiming to identify any build-up of troops.

Following attacks by high-flying Savoia S.79 bombers, Wilson took his flight to Bir Kenaysis, a well 20 miles down the Mersa Matruh to Siwa road. He found suitable ground nearby and

established a basic landing ground and telephone communication with Qasaba.

The slow-flying Lysanders soon came up against Italian Fiat CR.42 fighters. This emphasised the problems faced by lone reconnaissance aircraft when the crew, intent on observing ground activity, had little time to check the threat from air attack. The need for an escort became obvious and the thorny

question of using valuable, and scarce, fighters for such duties would cause constant discussion.

Sometimes the Lysanders were pressed into bombing attacks and, on October 27, Wilson and two other pilots flew a formation dive-bombing sortie against a concentration of lorries. Diving from 8,000ft, the three aircraft dropped 20lb bombs released at 3,500ft.





**Left**  
*A wheel change after landing in soft sand.*

The Italian advance was halted in early December and General Wavell – Commander-in-Chief Middle East – prepared to counterattack. Wilson took photographs to identify Italian troop and transport concentrations, but tactical reconnaissance remained the main task. The British advance was rapid and 208 was soon back at Sidi Barrani.

## Taking command

On December 16, 1940 Wilson was promoted to squadron leader and assumed command of 208 as the most experienced desert army co-operation pilot. At this time the unit also formed a Hurricane flight, the remaining two flights continuing to fly Lysanders. The Westland type was increasingly used in the artillery reconnaissance role, controlling ‘shoots’ during the bombardment of Bardia, Libya.

During this assault, Wilson took a flight of Lysanders to provide additional support for the artillery of the 6th Australian Division at Halfaya, from where he directed the operations. Squadron pilots controlled some very successful shoots, achieving many direct hits.

As the Allied ground forces approached Tobruk, the Hurricanes concentrated on long-range recce and the Lysanders carried out battlefield and artillery support. Following two successful shoots against Tobruk, the Australians began the attack on the important port.

The advance westwards continued and 208 moved constantly to be close to, and sometimes co-located with, the ground commander. Wilson continued to fly regularly but, together



**Above**  
*Maintenance on the former Italian airfield at Berce.*

with the squadron’s army liaison officers (ALOs), he spent an increasing amount of time directing operations.

By early February 1941, Benghazi had been taken and the Lysanders followed before 6 Squadron replaced 208 and the long trek back to Heliopolis began.

## Greek debacle

The squadron had barely settled in Egypt when it was ordered at short notice to reinforce beleaguered forces in Greece. The ground party left Alexandria on March 31 and six days later 208’s nine Lysanders and four Hurricanes arrived in Greece just as the Germans began a rapid advance south.

It soon became clear that the local army command intended using the Lysanders almost entirely as communication aircraft. Wilson was very unhappy with this arrangement and proposed they be used for tactical reconnaissance sorties.

He visited the RAF Wing HQ to

discuss the policy of control and clarify the role of the ALOs, who had proved their crucial value during the Western Desert campaign. He was told that all tasking would emanate, though not necessarily originate, from the RAF Wing, and the AOC and his staff would send the orders. This virtually cut the ALOs out of the tasking procedure.

As the withdrawal from Greece gathered momentum, a pair of Lysanders were shot down during the rescue of two downed Blenheim aircrew. The remainder continued to support the army as well as the chaos and poor communications allowed.

Two more Lysanders were destroyed on the ground and another was shot down. Eventually 208 Squadron had to evacuate Greece, four of the

Lysanders managing to get back to Egypt via Crete.

With his recent experience in the army co-operation role, Wilson was very critical of the arrangements and wrote a report highlighting his concerns when he returned to Egypt.

It concluded: “In Libya the role of the squadron was never in doubt and its work with the army was conducted with almost perfect harmony thanks to a singularity of control. In Greece the squadron’s role was undefined. Its allegiance was divided between the army and the RAF – it served two masters but to all intents and purposes saw only one.”

Although outdated, the Lysanders of 208 Squadron went on to play an important role during the war against the Vichy French in Syria. At the end of the campaign in July, Wilson was awarded the DFC, the citation concluding: “The successes achieved by his squadron in Libya, Greece and latterly Syria are due to [his] consistent exemplary leadership and personal ➔



**SPOT FACT** Lysander IIIs flew with 138 (Special Duties) Squadron from August 1941



**Above**  
The first casualty in Madagascar: a Lysander ended up in a ditch at Camp Arrachart.

**Right**  
The ground echelon of 1433 Flight heading south and crossing one of Madagascar's many river obstacles.

example both in the air and on the ground.”

Wilson was promoted to wing commander and handed over 208 Squadron to his flight commander before leaving for a staff appointment at HQ Middle East Air Force. He left the RAF as a group captain.

### Air component

John Harris was serving as an officer with the Devon Regiment when, in June 1940, he transferred to the RAF. After training on the Lysander at Old Sarum, Wiltshire, the home of 1 School of Army Co-operation, he was posted in January 1941 to 231 Squadron at Newtownards in Northern Ireland, equipped with Mk.IIIIs. The unit flew anti-invasion patrols each dawn, frequently combining them with regular patrols and reces along the border with neutral Eire (the Republic of Ireland).

Most of 231's time was spent in support of large-scale army exercises, often using field sites. In the spring of 1942 came a call for volunteers to form a new flight of Lysanders for overseas operations, and Harris was quick to offer his services.

At the end of March, No.1433 (Army Co-operation) Flight was formed and six Lysanders were dismantled, crated and loaded on a ship. On April 13 it sailed for a 'destination unknown', docking three weeks later in Durban, South Africa, before continuing to Vichy-controlled Madagascar.

Understandably there was great concern that the ports in Madagascar might be used by Japanese submarines which would have presented a severe threat to the crucial shipping routes



“...the Lysanders moved forward to a grass strip and the ground crew set off on a difficult overland journey which involved crossing several rivers where the bridges had been destroyed”

around the Cape of Good Hope and to the Middle East via the Red Sea.

Plans were made to occupy the island and operations to capture the port of Diego Suarez at the northern tip began on May 5. The landings were opposed but the port was in Allied hands within three days. Embarked aircraft of the Fleet Air Arm and units of the South African Air Force provided air support. Most of the Vichy Air Force on the island was destroyed and Arrachart airfield was occupied, becoming the home for the 'Air Component' under South African command.

The six Lysanders arrived at Diego Suarez on May 29 and were

transported to Arrachart where they were assembled. As the crates were being unloaded, an unidentified aircraft flew over the port – a Japanese reconnaissance type catapulted from the submarine I-10 surfaced 50 miles from the island.

The following evening, two Japanese submarines, the I-16 and the I-20, each launched a two-man midget submarine. Both entered the anchorage at Diego Suarez before each fired a torpedo, one striking the battleship HMS *Ramillies* and the other sinking an oil tanker.

### Island warfare

Since other ports in Madagascar could provide facilities for Japanese naval

forces, the South African commander decided to occupy the whole island. The Vichy authorities would not surrender, so plans were made to attack Majunga on the west coast and Tamatave on the east coast before advancing on the capital, Tananarive.

Harris was now the flight commander. The Lysanders conducted reces of the two ports and the only road that connected Diego Suarez with the rest of the island. They were also kept busy on communications work. By mid-July, approval had been given to assault Majunga, with 1433 Flight tasked with tactical reconnaissance and close support.

Majunga was captured on



September 10. The Lysanders, led by Harris, flew down from Diego Suarez and arrived at its small airfield almost before the troops. With 1433 Flight in direct support, 22 East African Brigade travelled as quickly as possible along the road to Tananarive. On the 19th, the Lysanders moved forward to a grass strip and the ground crew set off on a difficult overland journey which involved crossing several rivers where the bridges had been destroyed.

For the next few days 1433 flew in support of the advance to the capital, which eventually fell on September 23. The flight then moved into the former French air base at Ivato on the outskirts of Tananarive to enjoy some modest, permanent buildings and facilities.

Their stay was short-lived as the Vichy authorities still refused to surrender – so the Allied advance south recommenced, with 1433 Flight moving to the highland town of Antsirabe, south of the capital. The Lysanders provided close support by strafing and bombing enemy formations. During such an operation on October 9, one was forced down by ground fire. Its air gunner, Flt Sgt F Keeper, was seriously wounded and died a few hours later. He was buried in the Tananarive cemetery with full military honours.

By October 10 only two Lysanders remained serviceable and the flight was withdrawn to Ivato, signalling the end of its operations in Madagascar. By November 2 the campaign was successfully concluded and the whole island was in Allied hands.

As the flight's commander, Harris had been at the forefront of the

operations, flying almost daily army support and reconnaissance sorties. With torrential rain, tented accommodation and sometimes as many as 25% of personnel suffering from malaria or jaundice, conditions had been appalling. Surprisingly, no campaign medal was awarded for the actions in Madagascar.

With hostilities over, replacement aircraft arrived and 1433 took on photographic survey work to supplement the modest mapping of the area. The flight also embarked on a series of meteorological sorties, recording temperatures up to 17,000ft. On one at 16,500ft, Harris noted "many anvil-shaped cumulonimbus visible on all sides".

At the beginning of January 1943, Harris was promoted to squadron leader to command 1433 Flight. Its routine of survey, meteorological climbs and communications sorties continued till April when the unit was withdrawn. Harris left for Egypt for air staff duties before joining 70 Operational Training Unit at Shandur to train on the Martin Baltimore. He was awarded the DFC and, after completing a tour in Italy on Baltimores, the AFC.

**Above**  
Lysanders of 1433 Flight over Madagascar.

**Left**  
John Harris, at the rear, paying his respects at the funeral of Flt Sgt F Keeper.

**SPOT FACT** The type carried out clandestine special 'ops' sorties until the Allied invasion of France in 1944



**Above**  
A field at Somersham, near Huntingdon, where pilots and 'receptionists' were trained.

### 'Black' ops

Bob Large, a high-spirited and outstanding fighter pilot, had flown with 616 Squadron and the Bader Wing in 1941, his long service with the unit leading to the award of the DFC.

**Right**  
Bob Large.

After a rest tour he volunteered for service with 161 Squadron, flying specially-adapted Lysander IIIs (SD – Special Duties) on clandestine operations, arriving at Tempsford, Bedfordshire, on February 25, 1944. The unit's task was to deliver and pick up agents from France, a role requiring highly skilled and courageous pilots. They flew alone, at night, into hostile territory, never knowing who the reception committee would be.

The Lysander's wing configuration enabled it to land at a remarkably slow speed, which was the ideal for the SD role. A ladder was fitted to the rear cockpit on the port side, and a large streamlined fuel tank holding 150 gallons attached between the undercarriage legs. This significantly increased the radius of action and operations of up to eight hours were flown. Painted all black, the Mk.III (SD) became known as the 'Black Lysander'.

Training a pickup pilot involved short-field landings and take-offs, navigation and night flying. Although 161 Squadron was based at Tempsford, nearby fields simulated



landing grounds in France and were laid out in exactly the same fashion as those prepared by agents in occupied territory.

A 150-yard 'flarepath' was laid out into wind in an inverted 'L' with three pocket torches. Torch 'A' was with the 'receptionist' in charge of the landing ground at the downwind end where the passengers were waiting. Torch 'B' was 150 yards upwind and torch 'C' 50 yards to the right of torch 'B'. The flarepath had to be at least 100 yards from the downwind hedge – with no trees or obstructions on the approach – on a clear, firm and level strip of land about 600 yards long.

Once the aircraft could be heard close by, the chief receptionist at torch 'A' flashed the agreed code letter and,

once it was acknowledged by the Lysander pilot, the other torches were switched on. The pilot completed a low approach, landed at 60 knots and immediately taxied back to the take-off position and lined up ready for take-off.

As soon as the aircraft stopped, the receptionist moved to the foot of the ladder to help alighting passengers and take their luggage before any returning passengers climbed into the rear cockpit. The engine stayed running, coffee was exchanged for champagne, the chief receptionist switched on his torch – the signal for the others to be lit – and the pilot took off, only a few minutes after landing.

Accurate navigation was essential if a single torch were to be found in a

"Bob Large used half-million scale topographical versions to draw the tracks and mark the headings to fly, the distances and the enemy gun defences, using the latest intelligence"

field after a three or four-hour flight. Pilots spent much time preparing their maps. Bob Large used half-million scale topographical versions to draw the tracks and mark the headings to fly, the distances and the enemy gun defences, using the latest intelligence.

For the approach to the target field, a larger-scale map was used. All the charts were stuck together and cut into a long strip, with the track down the middle, and folded to fit into the top of a flying boot.

Ideally, operational sorties were flown in moonlight when water features were particularly clear: these were ideal for route turning points and initial points into target fields.

## Doubles and Trebles

After six weeks' intensive training, Large flew his first 'op'. During the moon period the Lysander Flight operated from Tangmere. His first pickup was for Operation Rubens on the night of April 9/10 when he took Vicomte Elie de Dampierre (known as 'Berger') to a large field near Angers. Large was on the ground for a few minutes before taking off with Captain Jean Godet in the rear cockpit.

Inbound aircraft made their first radio call as they crossed the English Channel, when they called 'Postgirl' for a bearing. If the sortie had been successful they transmitted days of the week – or numbers to indicate an unsuccessful sortie.

On April 30 Large flew a 'double' with Fg Off J P Alcock in the second

aircraft on Operation Organist. Each flew independently to an easily identified landmark – usually a river – where they rendezvoused. The first set off for the target field followed a few minutes later by the second.

The first Lysander completed the pickup and called 'Clear' as soon as it was airborne, enabling the second to land. In this way the aircraft were on the ground for the minimum time, reducing the risk to the ground parties.

After dropping off his 'Joe' (the codename given to agents) in a field near Châteauroux, Large picked up Violette Szabo, one of the great heroines of the Special Operations Executive (SOE). He was fired on by light flak on the return and the Lysander ground-looped on landing – the starboard tyre had been shot to pieces. He had been airborne for almost seven hours.

On May 9, Large flew on a 'treble' with Sqn Ldr Len Ratcliffe and Norwegian Lieutenant Per Hysing-Dahl on Operation Mineur. They flew independently and arrived within three minutes of each other to make a successful rendezvous near Bléré on the River Cher.

Ratcliffe set off first for the field near Touraine, and landed his two 'Joes'. Large followed ten minutes later with Hysing-Dahl landing as Large climbed away from the field. The three aircraft brought out eight agents on what was only the second successful 'treble'.

At the end of July, and with Flt Sgt Tommy Thomas in the rear cockpit,

Large took off for a mail pickup near Nevers deep in France. It was successfully completed, but a blanket of fog covering the south of England forced them to divert to Bolt Head, an airfield on the top of cliffs near Salcombe in Devon.

To assist the landing, mortar flares were fired through the fog. With the fuel tanks almost dry, Large made one final attempt by letting down over the sea and flying to 'nought' feet. Luckily he came out over the airfield and completed a very tight circuit to land after a seven-hour flight.

Bob Large took off from Tangmere on his final operation with 161 Squadron on August 6 – another long-range nocturnal mail pickup. Unable to get a fix near his target due to low cloud, he made for the River Loire, where conditions were much better, fixed his position and found his field where the reception committee were ready.

After dropping a mailbag, he completed a dummy run over the pickup point before snatching another bag on his next approach. After a six-hour flight, he landed back at Tangmere as dawn broke.

After the war, he became a commercial pilot, but spent his weekends flying Meteors with 601 (County of London) Squadron and became an expert aerobatic pilot. In 1990, he learnt that the French Government had made him a Chevalier of the Legion d'Honneur for his services to France during his time as a special duties pilot. ●

**Below**  
A 161 Squadron Lysander  
with a long-range tank.  
ALL VIA AUTHOR



## Westland Lysander



# Last Stand of the Lizzie

**Andy Hay** artwork of a Lysander that flew with the  
Royal Egyptian Air Force

**Artwork**  
Westland Lysander  
Mk.I Y504 of the  
Royal Egyptian Air  
Force in 1939.  
ANDY HAY-2015

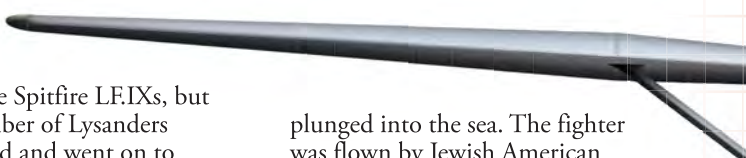
**I**n 1939, the Royal Egyptian Air Force was established, breaking away from army control. One of its first moves was to acquire a batch of brand new Westland Lysander Is. These received the serial numbers Y500 to Y517, and included our subject, Y504.

The newly formed 1 Squadron operated the Lizzies from Almaza, near Cairo, and received conversion training from the RAF's 208 Squadron, which was also based there. After being declared operational, the Egyptian unit was led by SqN Ldr Mahmud Salih until the end of the war. Under British control, the squadron carried out army co-operation duties, keeping all

of its aircraft airworthy until the end of 1940. Two further machines, both formerly with the RAF, joined the unit, probably due to serviceability issues with the original batch.

Fourteen remained in service until 1945, albeit relegated to target-towing and searchlight co-operation roles. The unit converted to fly Hawker Hurricanes and later Supermarine Spitfire LF.IXs, but a small number of Lysanders were retained and went on to see action in the 1948 Arab-Israeli War. These flew photo-reconnaissance operations with 3 (Communications) Squadron.

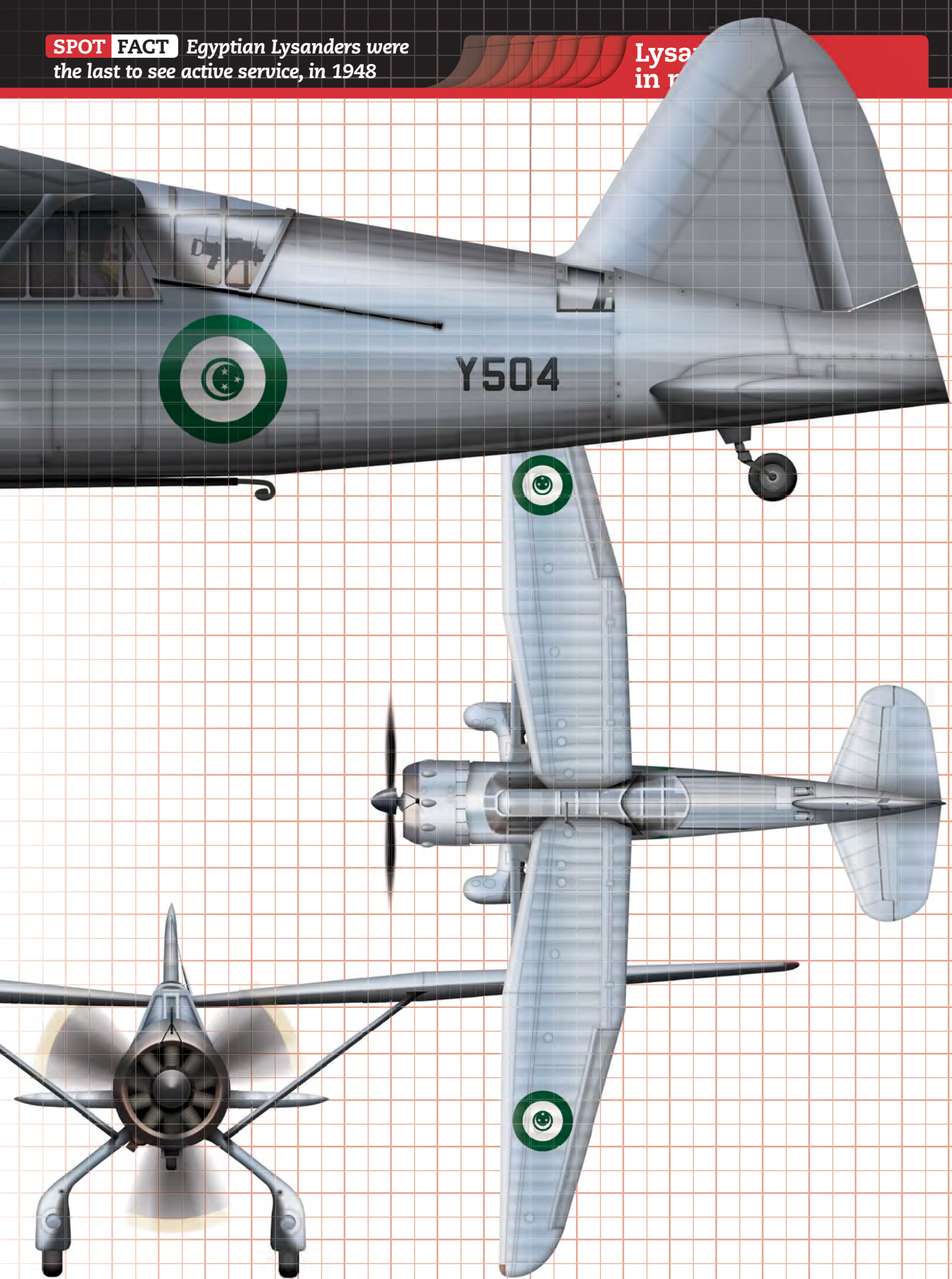
While flying over the Mediterranean on his way to Cairo, Lysander pilot Air Cdre Muhammad Abd al-Munaim Miqaati was attacked by an Israeli Air Force Avia S-199, a Czech-built version of the Messerschmitt Bf 109G. By diving to 100ft and dropping his speed, Miqaati evaded the attacker, which



plunged into the sea. The fighter was flown by Jewish American Bob Vickman, an Israeli Air Force volunteer. His loss remained a mystery until recounted by Miqaati many years later.

**SPOT FACT** Egyptian Lysanders were the last to see active service, in 1948

Lysander  
in r



**18** Lysanders were ordered by the Royal Egyptian Air Force in 1939



**Spotlight**

**Westland  
Lysander**

More in  
**Hope**  
than

**Expectati**



Westland's Lysander was never intended as an anti-submarine patroller, but as **Andy Thomas** explains, it took on the role as a stop-gap in Canada

# ion

A shortage of aircraft suitable for coastal patrol duties gave RCAF commanders cause for concern at the start of World War Two. New types were evaluated, but a stop-gap solution was needed – army co-operation Westland Lysanders stepped into the breach.

Patrols over the Bay of Fundy off the coast of Nova Scotia were flown by 118 Squadron during the latter months of 1939. Fg Off J W St Pierre flew the last such sortie in Lysander II 423 on April 27, 1940.

The unit was then split to form a number of Coastal Artillery Co-operation (CAC) detachments – 1 CAC at St John, New Brunswick, 2 CAC at Dartmouth to cover the

approaches to Halifax and 3 CAC from Patricia Bay, British Columbia, on the west coast, taking on the role from 111 Squadron. Later 4, 5 and 6 CAC detachments were formed at Sydney, Nova Scotia, Torbay, Newfoundland, and Yarmouth, Nova Scotia, respectively.

As enemy activity increased, the veteran aircraft were armed with a depth charge or an anti-submarine bomb carried on each undercarriage-mounted stub wing.

## Rogue U-boat

Kapitänleutnant Heinrich Lehmann-Willenrock's U-96 torpedoed the first of four ships it was to sink off the port of Halifax on February 19, 1941. Carnage so close to

**Below**  
With anti-submarine bombs fitted to the stub wings, an RCAF Lysander II wearing 122 Squadron codes. PAC



### Canadian Lysanders

Many Westland-built Lysanders were supplied to the RCAF, but between 1939 and 1942 a total of 225 of two different versions were built in Canada. At Hamilton, Ontario, the National Steel Car Corporation, more used to building railway rolling stock, produced 75 Mk.IIs (serials 416 to 490) powered by 905hp (675kW) Bristol Perseus XIIIs. The prototype first flew at Malton on August 16, 1939.

From December 1941 a batch of Mk.IIIs (2305 to 2454) fitted with 870hp Bristol Mercury XXs or XXXs was manufactured, the final ones coming off the line in late 1942. All of these were completed as Mk.IIIA TT target tugs, although not all were fitted with the tow lugs and winch gear.



Perseus-engined Canadian-built Mk.II 473 in standard camouflage, circa 1940. ARCHIVES CANADA



**SPOT FACT** RCAF 121 Squadron painted its aircraft in a yellow and black scheme for target-towing

**Far right**

Most of the Lysander IIIs produced in Canada served as target tugs. Mk.IIIA TT 2307 served with 4 Bombing and Gunnery School at London, Ontario, during 1943.

J D OUGHTON

**Right**

A poor, but rare, image showing a line of Lysanders of 1 CAC at Yarmouth in mid-1942. Nearest is Mk.II 463 with a Bolingbroke at the right. PAC



**Bottom right**

Lysander II 459 was tested on skis at Rockcliffe and Porquis Junction, both Ontario, during the winter of 1942/1943. Further trials were carried out the following winter using Mk.III 2425. The skis were not adopted operationally. ARCHIVES CANADA

the major ports in Nova Scotia resulted in a huge search, including Lysanders from locally-based CAC detachments.

In the late afternoon of February 23 the SS *Empire Union* sent a flash message that it was being shelled by a U-boat south of Halifax. Forces rushed to her aid and to hunt the intruder, the persistent U-96.

Among those

alerted was 2 CAC and just before 18:00 hours Lysander II 449, flown by Fg Off Humphreys, left Dartmouth for the area, more in hope than expectation. Sgt R H Smith, 449's gunner, later recounted events: "We headed approximately south for 20 minutes. We were flying parallel to a Catalina until we passed over a freighter coming up the coast.

"We went on beside

the Catalina for another 10 miles then it climbed and turned to sweep back the way we had come. We turned and followed back to the freighter then turned and headed into the setting sun. We flew this course for possibly 15 minutes.

"Then Fg Off Humphreys pointed out the periscope of a submarine a mile or so ahead. The periscope was clearly visible, also a swirling around what was

**Below**

Lysander II 417 at St John, New Brunswick, in July 1940 shortly after 118 Squadron had become 1 CAC detachment.





possibly the conning tower. As we approached, the submarine started to go under so that it was invisible for the last 30 seconds of our run on it.

"We passed over the spot where it had disappeared and dropped the depth charges. We did a climbing turn and the depth charges went off after dropping. No air bubbles or oil observed."

Alert lookouts had spotted the

Lysander, and although the U-96 was shaken by the well-aimed depth charges, it received just minor damage. With all the activity off Halifax, the CAC detachments from St John and Yarmouth arrived at Dartmouth as reinforcement.

The attack by Humphreys and Smith was the only time that a 'Lizzie' engaged a U-boat. Westland's versatile Lysander had chalked up another 'first'. ●

### Canadian Lysander Legacy

Of the approximately 20 Lysanders that survive today all but one was built in Canada or served with the RCAF. (The odd one out is the RAF Museum's Mk.III R9125 which was built at Yeovil in 1940.)

The RCAF phased out the bulk of its Lysanders in 1946 but a few did not get struck off charge until January 1947. A number of airframes were acquired by farmers in Saskatchewan as a source of metal for repairs and even for fencing. It is from such locations that derelict airframes were acquired in the 1970s and 1980s; moving to collectors and museums across the world.





# Spotlight

## Lysander Survivors

# Westland Lysander

The Shuttleworth Collection's airworthy Westland Lysander IIIA V9367 (G-AZWT). DARREN HARBAR



# Living Lysanders

We list the Westland Lysanders on display around the world



## Spotlight Next Month Douglas A-26 Invader

Next month, *Spotlight* shines on the Douglas A-26 Invader, a remarkably long-lived light bomber and attack aircraft that saw service in World War Two and the Cold War. A fast aircraft capable of carrying a variety of bombs and defensive armament, it was still operational with some air arms in the 1970s. We reflect on the Invader's history in our *January* issue, on sale in the UK on *December 1* – see page 88 for our latest money-saving subscription offers.



**A**round a dozen of Westland's unconventional monoplane are on display, with three currently airworthy. Several others,

not listed here, are believed to survive in private hands, with at least one being restored to fly in the UK. All are Mk.IIIIs.

### Westland Lysanders on display

Identity	Owner/location	Status
RCAF 2349	Canadian Museum of Flight, Langley, British Columbia	Static display
'R9003'	Canada Aviation and Space Museum, Ottawa	Static display
R9125	RAF Museum, Hendon, UK	Static display
'V9673'	IWM Duxford, Cambs, UK. (Really serial No.V9300)	Static display
V9367 (G-AZWT)	Shuttleworth Collection, Old Warden, UK	Airworthy
2363 (C-GCWL)	Canadian Warplane Heritage Museum, Hamilton, Ontario	Airworthy
416 (C-GVZZ)	Vintage Wings of Canada, Gatineau, Quebec	Airworthy
'V9312'	Florida Air Museum, US (composite)	Static display
N7791	National Air and Space Museum, Virginia, US	Static display
2375	Commonwealth Air Training Plan Museum, Manitoba, Canada	Static display
RCAF 1589	Indian Air Force Museum, Palam	Static display