

R A C H E L R E L A T



# Planes of Ascalon

VOL. 2

## Introduction

The **Kerguelen Cat** is the second book of the “Ascalon Circle” series. The series takes our protagonist, French pilot Yann Vatel, on adventures around the world, drawing heavily from the pulp serials of the 1950s and 1960s, as well as beloved classics such as the Bob Morane series, “Indiana Jones” and “Tales of the Gold Monkey”.

Intended as a love letter to the golden age of aviation, each book in the series is titled after a plane that features prominently in the story. The second one is the PBY-5A “Catalina”.

This companion booklet gives you a closer look at the “Cat”, and other planes that appear in the events that led to Yann’s incredible flight to Kerguelen.

**Caution: Due to the nature of its contents, this booklet may contain spoilers.**

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## TECHNICAL SPECIFICATIONS (PB5A)

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<b>FIRST FLIGHT</b>	28.03.1935 (XPBY-1)
<b>CREW</b>	10
<b>LENGTH</b>	19.48 m
<b>WINGSPAN</b>	32 m
<b>CRUISE SPEED</b>	109 kn (201 km/h)
<b>CEILING</b>	15,800 ft (4,800 m)
<b>RANGE</b>	2,190 nm
<b>POWERPLANTS</b>	2x P&W Wasp R-1830 (1,200 hp each)

## CONSOLIDATED PB5A “CATALINA”

The legendary PB5 Catalina was a versatile son of a gun! Commissioned in the late-1930s as a patrol bomber (hence the PB part of PB5, the Y being the indicator for its manufacturer Consolidated), it also served in roles as diverse as search and rescue, U-boat hunting, firefighting, mining scout, flying yacht, flying TV studio, passenger and freight transport... The nine (and counting!) lives of this sturdy flying-boat made it the most successful of its kind with over 3,300 units produced. Only a couple dozen remain today, and a handful still fly.

The Catalina still holds the record for the longest commercial flights (in terms of time aloft), with the 31-hour-long Double Sunrise flights operated by Qantas between Perth and Ceylon during World War 2.

G-PBYA “Miss Pick-Up”, depicted here, is the only PB5 (technically a Canadian-built Canso A) currently flying in Europe.



## Lioré et Olivier H-198

The Lioré-et-Olivier H-198 was a derivative of the H-190 family of airliners. This amphibian biplane of wooden and metal construction was equipped with a single engine mounted under the upper wing, and could carry up to six passengers.

The H-198 variant was a mail transport version, originally designed to be launched from ships by catapult. Nine were built in this configuration. In the early 1930s, famed author and pilot Antoine de Saint-Exupéry used a H-198 to undertake a series of survey flights for Air France over the Mekong river, in French Indochina.

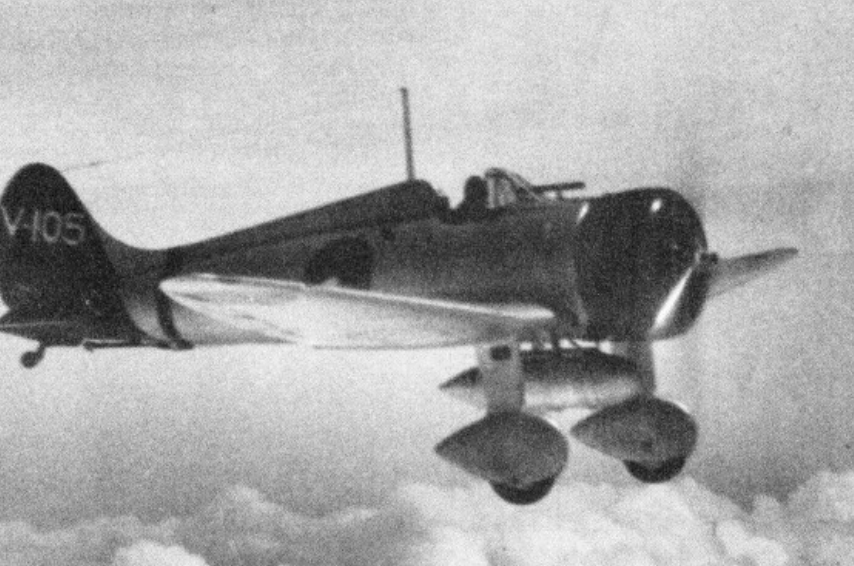
In addition to the passenger and cargo versions, a series was built for coastal patrols, as well as a single craft (Type H-194) for a long-distance expedition in Africa. Two twin-engine versions were also built, but did not enter production.

In total, 46 units of the H-190 series were produced. None survives to this day.

### TECHNICAL SPECIFICATIONS

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<b>FIRST FLIGHT</b>	1926
<b>CREW</b>	1
<b>LENGTH</b>	12.5 m
<b>WINGSPAN</b>	16 m
<b>CRUISE SPEED</b>	94.5 kn (175 km/h)
<b>CEILING</b>	n/a
<b>RANGE</b>	410 nm
<b>POWERPLANTS</b>	Gnome & Rhône 9Af (480 hp)



## MITSUBISHI Type 96

The Mitsubishi Navy Type 96 Carrier-based fighter, also known as the A5M, was the predecessor to the famous A6M "Zero".

Entering service in 1937, it saw action during the second Sino-Japanese War, where it demonstrated its deadly effectiveness and superiority against the American-built Boeing P26 "Peashooter" and Curtiss Hawk II flown by the Republic of China. It later found its match in the Soviet-built Polikarpov I-16.

The prototype had an inverted gullwing design, similar to the Chance-Vought F4U Corsair, but this was not retained on the production version. The plane had an open cockpit and a fixed undercarriage. The A5M was phased out as the Zero entered service, and the type saw its last combat action as a fighter in 1942. Its two-seat version remained in service as a trainer. Towards the end of the war, most surviving units were used as kamikaze aircraft.

The only A5M known to exist is a disassembled one underwater in the sunken ship *Fujikawa Maru*, in Micronesia.

### TECHNICAL SPECIFICATIONS

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<b>FIRST FLIGHT</b>	1935
<b>CREW</b>	1
<b>LENGTH</b>	7.57 m
<b>WINGSPAN</b>	11 m
<b>CRUISE SPEED</b>	235 kn (435 km/h)
<b>CEILING</b>	32,200 ft (9,800 m)
<b>RANGE</b>	648 nm
<b>POWERPLANTS</b>	Nakajima Kotobuki 41 (710 hp)



## CAUDRON C.630 "SIMOUN"

The Caudron C.630 "Simoun" was a monoplane launched in 1935. One of the first "tourers" capable of reaching speeds of 300km/h, it quickly became the airplane of choice for several long-distance raids.

Antoine de Saint-Exupéry famously crashed his Simoun in the Lybian desert in 1935 as he attempted to beat André Japy's speed record between Paris and Saigon. He and his mechanic André Prévost were rescued by a bedouin after several days without food or water. The ordeal, which the author recounted in "Wind, Sand and Stars", is often credited as one of the main inspirations behind "The Little Prince".

In December 1936, aviatrix Maryse Bastié flew her Simoun from Paris to Natal in Brazil in less than 12 hours. She had given her plane the name *Jean Mermoz* in tribute to the French pilot, who had just disappeared in the Atlantic.

Of the more than 500 units built, two survived to 2021, of which one is under restoration to fly.

### TECHNICAL SPECIFICATIONS

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<b>FIRST FLIGHT</b>	1934
<b>CREW</b>	1-2
<b>LENGTH</b>	8.7 m
<b>WINGSPAN</b>	10.4 m
<b>CRUISE SPEED</b>	150 kn (280 km/h)
<b>CEILING</b>	24,000 ft (7,300 m)
<b>RANGE</b>	660 nm
<b>POWERPLANTS</b>	Renault 6Pri (220 hp)





## HORTEN FLYING WINGS

The **Kerguelen Cat** uses artistic license to depict a key aircraft used by the elusive Working Group Seven, the story's main antagonists. Indeed, while based on the real concept of a jet-powered flying-wing, neither the Group's bombers nor the gliders featured in the story ever left the drawing stage.

The Horten brothers were German pilots and engineers who pioneered the flying-wing design. They designed the first jet-powered flying wing, the Ho 229, as a response to Hermann Göring's call for a "3x1,000" bomber: a machine that could fly 1,000 kg of bombs at 1,000 km/h to a distance of 1,000 kilometers. It reached the prototype stage with three built, of which one survives today in the United States.

The Horten H.XVIII (depicted here) was a planned evolution of the Ho 229, a blended wing body powered by six turbojets that would have had the capacity to cross the Atlantic Ocean, making it a contender for the *Amerikabomber* title... and a deadly asset for AG7!

### TECHNICAL SPECIFICATIONS (HORTEN H.XVIII)

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<b>FIRST FLIGHT</b>	never built
<b>CREW</b>	3
<b>LENGTH</b>	19 m
<b>WINGSPAN</b>	40 m
<b>CRUISE SPEED</b>	400 kn (750 km/h)
<b>CEILING</b>	n/a
<b>RANGE</b>	ca. 2,000 nm
<b>POWERPLANTS</b>	6x Junkers Jumo 004 (8,8 kN each)



## JUNKERS Ju 90



### TECHNICAL SPECIFICATIONS

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<b>FIRST FLIGHT</b>	28.08.1937
<b>CREW</b>	4
<b>LENGTH</b>	26.3 m
<b>WINGSPAN</b>	35.02 m
<b>CRUISE SPEED</b>	170 kn (320 km/h)
<b>CEILING</b>	18,860 ft (5,750 m)
<b>RANGE</b>	670 nm
<b>POWERPLANTS</b>	4x BMW 132 H-1 (820 hp each)

Like the Fw-200 featured in the previous volume, the Ju 90 was initially a civilian airliner, converted for military use after the outbreak of World War 2.

Based on the rejected Ju 89 bomber project, it was an all-metal design, with distinctive twin fins and rudders placed at the end of the tailplane, and swept wings that were fitted with a full-span flap/aileron combination.

A large plane, the Ju 90 could carry between 30 and 40 passengers. It entered service with Lufthansa, flying the Berlin-Vienna route between 1938 and 1940. The *Luftwaffe* then requisitioned it for troop transport, and several Ju 90 took part in the invasion of Norway during Operation Weserübung.

The Ju 90 was also used as a tow aircraft to test the giant Ju 332 glider, which inspired its role in *The Kerguelen Cat*.

Of 19 units built, none survived after the end of the war.



## WACO UBF-2

The Waco F-series is a popular range of civilian biplanes from the 1930s that has the rare distinction of still being in production today (with the 1934 YMF, relaunched in 1986 as the YMF-5).

A sleek three-seater powered by a beefy radial engine, the elegant lines of the F-series often make heads turn, and it has become a regular at airshows, often featured alongside its classic brethren, the De Havilland DH.60 Gipsy Moth and the Boeing Stearman Model 75.

Eagle-eyed readers will recognize the float-equipped UBF-2 described in **The Kerguelen Cat** from its movie appearance in the opening scenes of "Raiders of the Lost Ark". It is in fact one of three nods to the first Indiana Jones movie hidden in the book! Will you find the other two?

Many Waco F-series still fly today, both original and new, and factory-new aircraft can even be fitted with modern avionics and GPS.

### TECHNICAL SPECIFICATIONS

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FIRST FLIGHT	1930
CREW	1
LENGTH	7.04 m
WINGSPAN	9.14 m
CRUISE SPEED	99 kn (185 km/h)
CEILING	14,800 ft (4,500 m)
RANGE	350 nm
POWERPLANTS	Jacobs L-4 (225 hp)



## SUPERMARINE WALRUS

A distant cousin of the most famous Supermarine creation, the mighty Spitfire also created by R. J. Mitchell, the Walrus was a single-engine, amphibious reconnaissance biplane designed to be carried on ships such as cruisers or battleships and launched by catapult. It served many roles, from maritime patrol to rescue aircraft looking for ditched pilots.

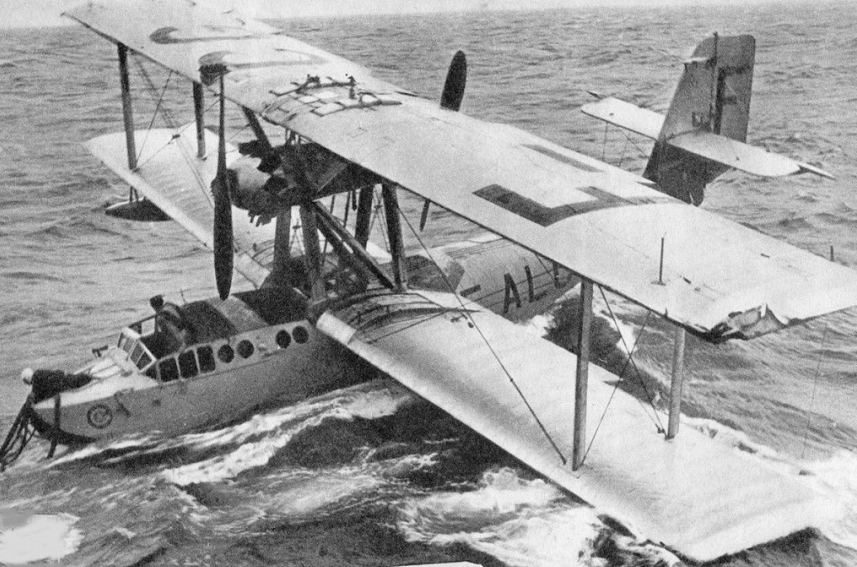
The design may look fairly similar to the LeO H-198, but it featured many technological improvements. It was the first all-metal R.A.F. amphibian with a fully retractable landing gear and a large, enclosed cockpit that gave the pilot a wide view of his surroundings. The engine was mounted between the wings in a pusher configuration.

The Walrus was used with great success as a U-boat hunter. Its service extended beyond World War 2, until technological advances with helicopters rendered it obsolete. Four survive today, in museums and private ownership.

### TECHNICAL SPECIFICATIONS

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<b>FIRST FLIGHT</b>	21.06.1933
<b>CREW</b>	4
<b>LENGTH</b>	11.46 m
<b>WINGSPAN</b>	13.97 m
<b>CRUISE SPEED</b>	80 kn (148 km/h)
<b>CEILING</b>	18,500 ft (5,600 m)
<b>RANGE</b>	520 nm
<b>POWERPLANT</b>	Bristol Pegasus (750 hp)



## CAMS CAMS 53/56

The CAMS 53 was a transport flying boat designed in 1928 for the Aéropostale company. It was a wood and canvas construction, powered by two engines mounted in a push-pull configuration, a popular design choice at the time. Like the Leo H-198 (which, in some roles, it succeeded) and the Walrus, the engine blocks were mounted above the fuselage, between the wings. The cabin could accommodate four passengers in addition to the three crew.

The CAMS 53 saw service with Aéropostale and Air Orient, mainly in the Mediterranean. In February 1932, a CAMS 56 suffered an oil leak, forcing the crew Mermoz and Rénier to land on rough seas, 108 nautical miles north of Algiers (pictured). Fortunately, the steamer *Timgad* rescued the crew, but the plane and its cargo of letters were lost.

Around 30 units were built, of which 15 were lost in accidents. All remaining CAMS 53 were phased out of Air France service by the late 1930s.

### TECHNICAL SPECIFICATIONS (CAMS 56)

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<b>FIRST FLIGHT</b>	1928
<b>CREW</b>	3
<b>LENGTH</b>	14.82 m
<b>WINGSPAN</b>	20.40 m
<b>CRUISE SPEED</b>	115 kn (212 km/h)
<b>CEILING</b>	n/a
<b>RANGE</b>	510 nm
<b>POWERPLANTS</b>	2x Gnome & Rhône 9Axx (480 hp)

IN THE SAME SERIES

# Planes of Ascalon

VOL. 1



**THE DRAGON RUN**  
ASCALON CIRCLE, PART I

YANN VATEL WILL RETURN IN



**THE COMMODORE'S GOLD**  
ASCALON CIRCLE, PART III

## PHOTO CREDITS

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SUPERMARINE WALRUS, AUTHOR UNKNOWN, (PUBLIC DOMAIN)  
CAMS 53, AUTHOR UNKNOWN, 1932 (PUBLIC DOMAIN)  
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