

R A C H E L R E L A T



Planes of Ascalon

VOL. 1

Introduction

The Dragon Run is the first 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 first one is the DH.89 “Dragon Rapide”.

This companion booklet gives you a closer look at the “Rapide”, and other planes that appear or are mentioned in the course of Yann’s mission to Stockholm and its aftermath.

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

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DE HAVILLAND DH.89 “DRAGON RAPIDE”

An evolution of the larger DH.86 Express (see page 12), the Dragon Rapide quickly became the airplane of choice for many airlines. The refined design was more durable, more stable, and very economical to operate. It could accommodate up to eight passengers.

The Dragon Rapide also saw service with the RAF under the name “Dominie”, as a trainer and paratroop carrier.

As alluded to in **The Dragon Run**, a British Rapide was infamously used to carry General Franco back from exile in July 1936. The civil war that followed marked the end of the Spanish Republic, replacing it with a bloody dictatorship that lasted until 1975.

Of the hundreds of Rapides built, quite a few are still flying as of 2020, most of them in commercial service, offering passengers a chance to go on a magical ride back in time.

TECHNICAL SPECIFICATIONS

FIRST FLIGHT	01.04.1934
CREW	1
LENGTH	10.52 m
WINGSPAN	14.63 m
CRUISE SPEED	136 kn (253 km/h)
CEILING	16,700 ft (5,100 m)
RANGE	483 nm
POWERPLANTS	2x de Havilland Gipsy Six (210 hp each)



FOCKE-WULF Fw-200 "Condor"

German spymaster Frederik is the main antagonist of **The Dragon Run**, and his transport of choice is the Focke-Wulf Fw-200 "Condor". The Condor was Lufthansa's answer to the growing demand for long-range passenger flights in the second half of the 1930s. A modern, all-metal, four-engined monoplane, the Condor proved its capabilities by becoming the first heavier-than-air craft to fly nonstop from Berlin to New-York.

Like many airliners of the era, the type also saw military service. The Condor was used by the Luftwaffe as a long-range troop transport and patrol-bomber, notably in support of the Kriegsmarine over the North Sea. In addition, one unit was specifically customized as an executive transport and used as Adolf Hitler's personal plane.

No complete Fw-200 survives to this day, and only one currently exists as a restoration project in Germany.

TECHNICAL SPECIFICATIONS

FIRST FLIGHT	27.07.1937
CREW	5
LENGTH	23.45 m
WINGSPAN	32.85 m
CRUISE SPEED	181 kn (335 km/h)
CEILING	20,000 ft (6,000 m)
RANGE	1,920 nm
POWERPLANTS	4x Bramo 323R-2 (1,184 hp each)



SHORT S.25 SUNDERLAND, Mk.I

The Short S.25 Sunderland was a large British flying-boat patrol bomber. Developed at the same time as the Short Empire in service at Empire Airways, it entered service in 1938. With an extremely long-range of close to 3,000 kilometers, the Sunderland was one of the most powerful and heavily armed flying-boats of the RAF, reportedly earning the nickname "Flying Porcupine" from the Germans.

This is a picture of the very aircraft that features in **The Dragon Run**, a Mk.I Sunderland registered L2163 assigned to 210th Squadron, based at Pembroke Dock in Wales. I had originally titled the chapter after T9044, another Mk.I Sunderland whose wreck lies at Pembroke Dock, until I researched it more and discovered it had been commissioned only two months prior to its loss during a gale in November 1940, making the timeline untenable.

A few Sunderlands still survive as of 2020 in museums, with one potentially airworthy in Florida, USA.

TECHNICAL SPECIFICATIONS

FIRST FLIGHT	16.10.1937
CREW	9-11
LENGTH	26 m
WINGSPAN	34.38 m
CRUISE SPEED	155 kn (286 km/h)
CEILING	16,000 ft (4,900 m)
RANGE	1,550 nm
POWERPLANTS	4x Bristol Pegasus XVIII (1,065 hp each)



SPARTAN CRUISER

When Yann Vatel and his party become stranded in Sweden, help arrives aboard a little-known British Airways trimotor: the Spartan Cruiser.

Trimotors were quite en vogue for a time in the 1930s. Other examples include the Couzinet 70 flown by Jean Mermoz, and the Ford Trimotor and Breguet 393T featured in this volume.

Introduced in 1933, the Cruiser was initially designed as a mail plane, before being repurposed for passengers. It saw service at BA and several smaller airlines before being retired in the early 1940s.

The version featured in **The Dragon Run** is a fictional, secret variant with much better range than the actual planes, but otherwise identical.

Of less than twenty built, only one Spartan Cruiser fuselage survives in a museum in Scotland.

TECHNICAL SPECIFICATIONS

FIRST FLIGHT	1932
CREW	2
LENGTH	11.94 m
WINGSPAN	16.46 m
CRUISE SPEED	115 kn (214 km/h)
CEILING	15,000 ft (4,570 m)
RANGE	270 nm
POWERPLANTS	3x de Havilland Gipsy Major (130 hp each)



DOUGLAS DC-2 /DC-3

The Douglas DC-2 was the precursor of the massively successful DC-3/Dakota. Launched in 1934, it was the main competitor of the Boeing 247 (see page 13). Both aircraft marked a radical departure from earlier airliners such as the Ford Trimotor: a sleek, streamlined airframe, a low cantilever wing and two engines rather than three.

Replace the radials with jet engines, and airliners today are not much different!

The DC-2 ushered the modern era of air travel, proving that planes could be as safe and reliable as they could be comfortable. A year after the DC-2, Douglas introduced its bigger brother the DC-3, which would go to become the most successful production aircraft of all times, with over 16,000 units built across all its variants.

Several DC-2s survive today in museums. Only a couple are airworthy. However, numerous DC-3s still remain in commercial operations today. A few were even converted to turbo-props!

TECHNICAL SPECIFICATIONS (DC-2)

FIRST FLIGHT	11.05.1934
CREW	2-3
LENGTH	18.90 m
WINGSPAN	25.91 m
CRUISE SPEED	170 kn (310 km/h)
CEILING	22,450 ft (6,840 m)
RANGE	870 nm
POWERPLANTS	2x Wright Cyclone GR-1820 (1,000 hp each)



TECHNICAL SPECIFICATIONS

FIRST FLIGHT	25.05.1928
CREW	1-2
LENGTH	12.32 m
WINGSPAN	10.97 m (lower), 21.84 (upper)
CRUISE SPEED	95 kn (175 km/h)
CEILING	18,000 ft (5,500 m)
RANGE	520 nm
POWERPLANTS	2x P&W Wasp R-1340 (420 hp each)

SIKORSKY S-38 "OSA'S ARK"

The peculiar Sikorsky S-38 appears in a flashback at the beginning of **The Dragon Run**. Introduced in the late 1920s, the S-38 was an amphibian: Combining the abilities to move on land, on sea and in the air, it offered unparalleled possibilities for its operators.

As a flying yacht for the wealthy, its most illustrious owner was perhaps film tycoon and aviator Howard Hughes, but it is in the far reaches of Africa that it gained its fame, as one of two amphibians flown by explorers Martin and Osa Johnson, whose pioneering documentaries captured the world's imagination.

As told by Sir Tim, Martin's "Osa's Ark" was an S-38 painted with zebra stripes, while Osa flew a single-engine S-39 painted in giraffe pattern, called "Spirit of Africa".

There are no original S-38 survivors, but two replicas exist. N28V, pictured here in 2012 with the Osa's Ark scheme, also appears in the 2010 Howard Hughes biopic "The Aviator".



LOCKHEED MODEL 10 ELECTRA

The Model 10 Electra was the first all-metal airplane produced by Lockheed. Clarence "Kelly" Johnson, then a student at the University of Michigan, provided key contributions to the design. He later joined Lockheed, where he became the main architect behind such iconic machines as the P-38 Lightning, the L-049 Constellation, and perhaps the most famous "Skunk Works" creation, the SR-71 "Blackbird".

The Electra was moderately successful, reaching a production number of about 150 units. In addition to airlines, it was popular as a private plane. Its most notorious pilot was undoubtedly Amelia Earhart, who famously flew a custom Model 10E in her ill-fated 1937 circumnavigation attempt.

Less than twenty Model 10 still exist today in museums, with two airworthy examples in the Czech Republic and Canada. Pictured here is a Model 12 "Electra Junior", a slightly smaller evolution of the Model 10 that was used in the 2009 Amelia Earhart biopic "Amelia".

TECHNICAL SPECIFICATIONS

FIRST FLIGHT	23.02.1934
CREW	1-2
LENGTH	11.76 m
WINGSPAN	17 m
CRUISE SPEED	169 kn (314 km/h)
CEILING	21,250 ft (6,480 m)
RANGE	700 nm
POWERPLANTS	2x P&W Wasp Junior R-985 (450 hp each)

DE HAVILLAND DH.60 “GIPSY MOTH”

As far as iconic biplanes go, the venerable DH.60 Gipsy Moth is firmly on top of the list, alongside the Boeing Stearman and the Waco “F” Series. This small biplane was introduced in 1925 and quickly became a reference in the United Kingdom, occupying an estimated 85 percent of the market by 1929.

Favoured by flying clubs and amateurs, the Gipsy Moth was one of the first mass-produced aircraft. It also became the airplane of choice for a number of raids and record attempts.

In modern times, the iconic flying scene in “Out of Africa” (1985), starring Meryl Streep and Robert Redford, cemented the Gipsy Moth’s place in the public consciousness as the epitome of the romanticism of flight.

About 40 DH.60s have survived to 2020, including G-AAMY, of “Out of Africa” fame. One of them, VH-UAE, is the longest-registered, airworthy aircraft in Australia, having been registered there since November 1925!



TECHNICAL SPECIFICATIONS

FIRST FLIGHT	22.02.1925
CREW	1-2
LENGTH	7.29 m
WINGSPAN	9.14 m
CRUISE SPEED	74 kn (137 km/h)
CEILING	14,500 ft (4,400 m)
RANGE	280 nm
POWERPLANT	de Havilland Gipsy I (100 hp)



FORD 4-AT-E TRIMOTOR

The granddaddy of airliners, the venerable Trimotor is a staple of 1930s aviation, and is as instantly recognizable as the Junkers Ju 52 or the Douglas DC-3.

Introduced in 1926, the Trimotor was the first commercially successful airliner. For the first time, operators offered coast-to-coast service in relative comfort for up to 11 passengers.

A Ford Trimotor was the first to fly above the geographic South Pole, in famous explorer Richard Byrd's 1929 expedition. Eagle-eyed cinephiles will remember the Trimotor from its many movie appearances, notably in "Indiana Jones and the Temple of Doom".

In spite of its success, it was quickly superseded by better competitors. As such, it was already obsolete by the time of its appearance in Vatel's 1936 flashback during *The Dragon Run*.

18 Trimotors survive today (out of 199 built), of which eight are maintained in flying condition.

TECHNICAL SPECIFICATIONS

FIRST FLIGHT	11.06.1926
CREW	3
LENGTH	15.19 m
WINGSPAN	22.56 m
CRUISE SPEED	93 kn (172 km/h)
CEILING	16,500 ft (5,000 m)
RANGE	500 nm
POWERPLANTS	3x Wright J-6-9 Whirlwind (300 hp each)

DE HAVILLAND DH.86 EXPRESS

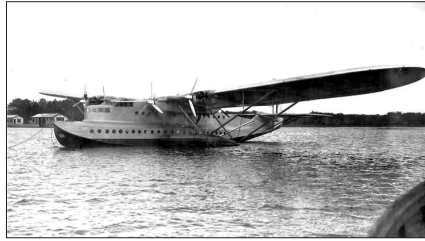


"Flaps" Kendall's ride is a DH.86 Express, the four-engine big brother of our hero's Rapide. Launched in 1935, the Express could accommodate two pilots and up to 16 passengers.

Its debut was overshadowed by a series of crashes, after which the design was refined. Among other things, two additional fins were added to the tail to improve stability. Even then, the type was obsolete before it was even launched, and showed the limits of what could be achieved with only wood and fabric: the future would belong to all-metal planes like the Boeing 247 and its brethren.

One Express wreck survives today in Australia.

LATÉCOÈRE LATÉ 521



Yann Vatel recounts being among the crew of the massive Laté 521 "Lieutenant-de-Vaisseau-Paris" in 1935. This six-engine, double-deck behemoth was the largest aircraft ever built in France at the time of its launch, and the first to be truly capable of flying across the Atlantic ocean.

Salvaged after it sank during a hurricane in Florida, the Laté 521 then entered regular service on long distance routes, breaking several records in the process. In one occasion, pilot Henri Guillaumet flew a record 5,871 km from New York City to Biscarrosse, including 2,300 km with one engine out.

All five Laté 520-series aircraft built were destroyed during World War 2.

LATÉCOÈRE LATÉ 300



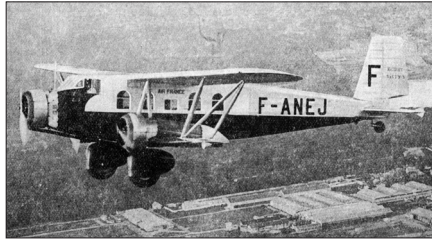
The Laté 300 gained fame under tragic circumstances with Jean Mermoz's disappearance on F-AKGF "Croix-du-Sud" in December 1936.

Shortly after its launch, the Laté 300 set a record in 1933 by flying a distance of 3,697 km non-stop between France and Senegal. Before its loss at sea, it had completed 23 crossings.

With two planes lost following apparent mechanical failures, the remaining units were switched to more reliable engines. The last one was retired in 1941.

Mermoz's crew on December 7th, 1936 were Alexandre Pichodou, Henri Ezan, Edgar Cruveilhaire and Jean Lavidalie.

BREGUET 393T



A quaint ugly duckling, the Breguet 393T gets a quick “blink and you’ll miss it” mention in **The Dragon Run**. Another type that was outclassed even before its launch, the 393T saw limited service on Air France routes as a cargo plane and later for passenger service.

Introduced in 1934, this sesquiplane design is typical of the era, as is the choice of three engines. Like the 1926 Trimotor, it had an all-metal construction, but considering it launched the same year as the DC-2 and the Electra, one can easily see how the 393T stood virtually no chance against its more advanced competition.

Nine were built.

BOEING 247



Launched in 1933, the Boeing 247 was the first to pioneer what would later become the basic formula in the industry: all-metal construction, low cantilever wing and retractable landing gear. Despite this, its capacity and performance couldn’t compete with the Electra or the DC-3, and only 75 were built. Four survive as of 2020, one airworthy.

One visible difference in design between the Boeing and the Douglas is the Boeing’s cockpit windows, which are angled forward. Paired with its graceful curves, this gives the plane a decidedly art-deco look.

The 247 is mentioned in **The Dragon Run** in relation to the unfortunate 1937 accident that befell Martin and Osa Johnson, killing Martin.

HANDLEY PAGE H.P.42



After meeting “Flaps” Kendall and checking out the DH-86 Express, Yann Vatel comes across a derelict that he identifies as a Handley Page H.P.42. The H.P.42 was an early four-engine biplane capable of carrying up to 24 passengers. Introduced in 1931, it was a sesquiplane design with a triple-fin tail.

The H.P.42 complemented the Empire Airways fleet of flying-boats and its recognizable shape made it one of the airline’s signature planes. It was retired in 1939 after almost a decade without major accidents or fatalities, but all eight units built were lost or scrapped by 1941.

A H.P.42 features in the Agatha Christie story “Death In The Clouds”.

IN THE SAME SERIES

Planes of Ascalon
VOL. 2



THE KERGUELEN CAT
ASCALON CIRCLE, PART II

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LATÉCOÈRE LATÉ 520, AUTHOR AND YEAR UNKNOWN (PUBLIC DOMAIN)
LATÉCOÈRE LATÉ 300, AUTHOR AND YEAR UNKNOWN (PUBLIC DOMAIN)
BREGUET 393T, AUTHOR UNKNOWN, 1935 (PUBLIC DOMAIN)
BOEING 247, BY KEN FIELDING, 2012 (CC-BY-SA 3.0)
HANDLEY PAGE H.P.42, AUTHOR UNKNOWN, 1931 (PUBLIC DOMAIN)
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