

SIDDELEY DEASY and ARMSTRONG SIDDELEY

AERO PISTON ENGINE LINEAGE

From 1916 ----- 1957

(Proof Copy Only)



SIDDELEY DEASY and ARMSTRONG SIDDELEYAERO PISTON ENGINE LINEAGE

Siddeley Deasy 1916 - April 1919

ENGINE NAME	TYPE	POWER	YEAR	REMARKS
PUMA	6 Cylinder Inline Water Cooled	200/240 H.P. AT 1,400 RPM WITH A BORE OF 5.7 in AND A STROKE OF 7.5 in	1916	The Puma was a B.H.P. aero engine, redesigned by Siddeley Deasy Company.
TIGER	12 Cylinder V Formation Water Cooled	500 H.P. AT 1,500 RPM WITH A BORE OF 6.3 in AND A STROKE OF 7.1 in	1918/20	The Tiger was in fact a double Puma with slightly enlarged and improved cylinder blocks set on a common crankcase.
OUNCE	2 Cylinder Air Cooled Horizontally Opposed	40 H.P. AT WITH A BORE OF 5 in AND A STROKE OF 5 in	1917/18	The Ounce was the first air cooled engine produced by Siddeley Deasy, but only in a limited quantity.
JAGUAR	14 Cylinder Air Cooled Two Row Radial	300 H.P. AT 2,000 RPM WITH A BORE OF 5 in AND STROKE OF 5.5 in	1918	The Jaguar was an idea that was first germinated at the Royal Aircraft Factory and designed, developed and produced by Siddeley Deasy.
LYNX	7 Cylinder Air Cooled Single Row Radial	150 H.P. AT 2,000 RPM WITH A BORE OF 5 in AND STROKE OF 5.5 in	1919	The Lynx was in fact half a Jaguar.

This completes the history of the SIDDELEY DEASY Company. The Company name was changed to ARMSTRONG SIDDELEY with the merging of ARMSTRONG WHITWORTH and SIDDELEY DEASY in April 1920.

SIDDELEY DEASY and ARMSTRONG SIDDELEYAERO PISTON ENGINE LINEAGE

Armstrong Siddeley April 1920 - 1957

ENGINE NAME	TYPE	POWER	YEAR	REMARKS
JAGUAR	14 Cylinder Air Cooled Two Row Radial	300 H.P. <i>SEE SIDDELEY DEASY FOR BORE & STROKE & RPM.</i>	1918	With the Lynx the Jaguar formed the basic design for all Armstrong Siddeley Aero piston engines. In 1922 the Jaguar passed it's official type test.
JAGUAR IV	14 Cylinder Air Cooled Two Row Radial	385 H.P. <i>AS ABOVE FOR BORE & STROKE & RPM</i>	1925	This was the first known Jaguar incorporating Supercharging and the first production engine in the world to use a S/C.
The Jaguar history was to go on well into the mid 1930's with mark's up to Mk.VII. A range of power was achieved by adding Gearing, ONLY , THEN SUPER CHARGING AND ULTIMATELY A COMBINATION OF THE TWO . Finally the power ranged from 300 - 470 H.P.				
LYNX	7 Cylinder Air Cooled Single Row Radial	150 H.P. <i>SEE SIDDELEY DEASY FOR RPM, BORE & STROKE.</i>	1919	The Lynx as already stated was half a Jaguar. Interchangeability of parts between the Mongoose, Double Mongoose and Jaguar was also a design feature.
The Lynx history was to go on into the early 1930's with marks up to Mk.IVc. A range of power was achieved by adding Gearing and Supercharging. Finally the power ranged from 150 - 240 H.P.				

SIDDELEY DEASY and ARMSTRONG SIDDELEYAERO PISTON ENGINE LINEAGE

Armstrong Siddeley April 1920 - 1957

ENGINE NAME	TYPE	POWER	YEAR	REMARKS
LYNX MAJOR	7 Cylinder	260 ²⁸⁰ H.P. AT 2,000 RPM WITH A BORE OF 5.25" BORE AND STROKE OF 5.7 in	Not known* (could be about 1930/32)	As far as any records indicate, there was only <u>One</u> mark of this engine. It got the extra power from a Geared Fan which was fitted to the engine. It was renamed the CHEETAH in 1933/34.
PANTHER Mk. I - X	14 Cylinder Air Cooled Two Row Radial	500- 760 HP AT 2,450 RPM WITH A BORE OF 5.25 in BORE AND STROKE OF 5.5 in	About 1929	The Panther was originally known as the Jaguar Major. A range of power was achieved by adding Gearing and Supercharging. The mark's of Panther were from I - X.
LEOPARD In two marks only as far as is known	14 Cylinder Air Cooled Two Row Radial	700- 840 HP 854 AT 1,870 RPM WITH A BORE OF 6 in AND STROKE OF 7 1/2 in	1929/30	The Leopard was offered in two versions a Plain & a Geared type. Records seem to indicate that the engine name was changed late in 1930 to that of Tiger.
TIGER Mk. I - IXc	14 Cylinder Air Cooled Two Row Radial	700-920 HP AT 2,450 RPM. WITH A BORE OF 5.5 in AND STROKE OF 6 in	1929 - early 1940's	The Tiger as previously stated seemed to be a follow on from the Leopard. A range of power was achieved by adding Gearing and Supercharging and Gearing/ Supercharging.

SIDDELEY DEASY and ARMSTRONG SIDDELEYAERO PISTON ENGINE LINEAGE

Armstrong Siddeley April 1920 - 1957

ENGINE NAME	TYPE	POWER	YEAR	REMARKS
MONGOOSE Mk. 1 - III*	5 Cylinder Air Cooled Single Row	130/140 450/455 E.P. AT 1,850 RPM WITH A BORE OF 5 in AND STROKE OF 5.5 in	1927/28*	The Mongoose was in effect a 5 cylinder Jaguar with no Supercharging or special Gearing.
DOUBLE MONGOOSE Only one Mark*	10 Cylinder Air Cooled Two Row Radial	342 E.P. AT 2,200 RPM WITH A BORE OF 5 in AND STROKE OF 5.5 in	1931	The Double Mongoose was in effect a 2 row, 10 cylinder Jaguar. But even the name Double Mongoose was changed at a later date to Serval.
SERVAL* MK 1-Y	as above	As above	About 1932*	See above
GENET Mk.1 - IV*	5 cylinder Air Cooled Single Row Radial	80 ⁸⁵ /E.P. AT 2,200 RPM WITH A BORE OF 4 in AND A STROKE OF 4 in	1926/27	The Genet was the smallest radial engine (in power) that was designed and produced by Armstrong Siddeley.
GENET MAJOR Only one Mark*	As above	100 E.P. AT 2,200 RPM WITH A BORE OF 4.25 in AND A STROKE OF 4.5 in	About 1929 - 1930*	The Genet Major was a development of the Genet.
GENET MAJOR No Mark No*	7 cylinder Air Cooled Single Row Radial	140 E.P. AS ABOVE	1930/31*	This Genet Major was a development of the 5 cylinder Genet series. The little evidence available points to the fact that the name of the engine may very well have been changed to Civet.

SIDDELEY DEASY and ARMSTRONG SIDDELEYAERO PISTON ENGINE LINEAGE

Armstrong Siddeley April 1920 - 1957

ENGINE NAME	TYPE	POWER	YEAR	REMARKS
CIVET*	7 cylinder Air Cooled Single Row Radial	140 H.P.	1934*	Very little else is known about the Civet from that stated above. What is fact however is that the Civet was built in a very limited quantity for an Air Ministry Contract.*
CHEETAH Mk. I - XXVII	7 cylinder Air Cooled Single Row Radial	260/475 H.P. AT 2,100 RPM WITH A BORE OF 5.25ins AND A STROKE OF 5.5ins	1933/34	The Cheetah started life as a Lynx Major but it was soon found that with the fore-casted potential of the design necessitated changing the name to Cheetah. The power range was achieved by adding Gearing, Geared Fan, Paddle Fanging, and Supercharging in various ways. Finally the Cheetah was the first engine of the type to achieve 1200 hours overhaul life.
HYENA No Mark Number	15 cylinder Air Cooled Three Row Radial	850/950 H.P.*	1932/33	The Hyena was an attempt to achieve an engine with a power rating in excess of a 1000 H.P., but due to the engine being too heavy for its power and difficulty with the cooling of the rear cylinders, after some development flying in a A.W. XVI the project was abandoned.

SIDDELEY DEASY and ARMSTRONG SIDDELEYAERO PISTON ENGINE LINEAGE

Armstrong Siddeley April 1920 - 1957

ENGINE NAME	TYPE	POWER	YEAR	REMARKS
TERRIER No Information		About 1934*	It is believed from the scant information available that the Terrier was only a cylinder development project.
DEERHOUND No Mark Number	21 cylinder Air Cooled Three Row Radial	1500 H.P.	1937/39	The Deerhound was the largest engine both in power and numbers of cylinders designed and made by Armstrong Siddeley. There are a number of these engines built (about 8 in all) two Deerhounds were fitted to Armstrong Whitworth Whitley 1 Bomber for development flying, but due to the aircraft crashing and failure of the unusual reverse flow cooling system employed to cool the cylinders the project was abandoned in the early 1940's.
COUGAR No Mark Number	9 cylinder Air Cooled Single Row Radial	690- H.P. AT 2,500 RPM WITH A BORE OF 5.5 in AND A STROKE OF 5.5 in AND MODERATELY SUPERCHARGING	1943*	The Cougar was the only 9 cylinder engine designed and built by Armstrong Siddeley as far as it is known. No further history is known*.
CHEETAH PARD * NO MARK NUMBER	* 7 CYLINDER * AIR COOLED SINGLE ROW RADIAL	NOT KNOWN * BUT THOUGHT TO HAVE MORE POWER THAN THE LAST MARK OF CHEETAH	1946*	* BOTH OF THESE ENGINE DESIGNS APPEARED IN THE PLANNING DEPARTMENT'S REGISTER AT PARKSIDE AS FAR AS IS KNOWN NO FURTHER WORK WAS UNDER TAKEN OTHER THAN INITIAL DESIGN IDEAS THE APPROXIMATE DATE AS SHOWN IN PLANNING RECORDS WAS 1938/39 - 1946
WOLFHOUND NO MARK NUMBER	* 21 CYLINDER * AIR COOLED THREE ROW RADIAL	NOT KNOWN * BUT THOUGHT TO HAVE MORE DESIGN POWER THAN THE -6 DEERHOUND	1936*	

SIDDELEY DEASY and ARMSTRONG SIDDELEY

AERO PISTON ENGINE LINEAGE

ARMSTRONG SIDDELEY APRIL 1920 - 1957

CONCLUSIONS

The official records of the Company were destroyed due to enemy action in 1940, therefore the information may in some instances be suspect. (PARTICULARLY WHERE asterisks appear). The Author of this document apologise to the reader for any wrong information in previous pages, and will be only too pleased to correct any errors on receipt of positive information.

THANKS ARE EXTENDED TO MR SR FROST SERVICE DEPARTMENT PARKSIDE COVENTRY FOR HIS VERY ABLE ASSISTANCE AND ADVICE IN THE COMPILATION OF THIS WORK.

Peter A Round.

.....
P.A. ROUND

May 1984

REVISION FEB 1985

ONE AIRCRAFT ONLY FITTED WITH TWO TIGER ENGINES THIS WAS
SIDDELEY SNAIA BOMBER STARTED 1918 COMPLETED BY ARMSTRONG
WHITWORTH IN 1921 FLEW ONLY ONCE.

ONE AIRCRAFT ONLY FITTED WITH AN OUNCE THIS WAS THE BRISTOL
BABE II IN 1919

ONE OF THE AIRCRAFT FITTED WITH FOUR PUMA ENGINES WAS THE BRISTOL
BRAEMA I IN 1918

ONE OF THE AIRCRAFT FITTED WITH THE LYNX ENGINE WAS THE AVRO
504N IN 1922

ONE OF THE AIRCRAFT FITTED WITH THE PANTHER ENGINE WAS THE FAIREY
GORDON IN 1930

ONE OF THE AIRCRAFT FITTED WITH THE MONGOOSE ENGINE WAS THE
HAWKER TOMIT IN 1928

ONE OF THE AIRCRAFT FITTED WITH TWO TIGER ENGINES WAS THE ARMSTRONG
WHITWORTH WHITLEY I IN 1936

ONE AIRCRAFT ONLY FITTED WITH A CIVET ENGINE WAS THE CIERIA
AUTOGIRO TYPE C30 IN 1934

ONE OF THE AIRCRAFT FITTED WITH THE GENET ENGINE WAS THE DE-HAVILLAND
D.H. 60 IN 1926

ONE OF THE AIRCRAFT FITTED WITH THE GENET MAJOR ENGINE WAS THE AVRO
CLUB CADET ABOUT 1936

ONE AIRCRAFT ONLY FITTED WITH THE LYNX MAJOR WAS THE BLACKBURN
LINCOCK III IN 1930

ONE OF THE AIRCRAFT FITTED WITH FOUR DOUBLE MONGOOSE WAS THE ARMSTRONG
WHITWORTH ATALANTA IN 1932

ONE OF THE AIRCRAFT FITTED WITH TWO SERVAL ENGINES WAS THE SARO CLOUD
IN 1931

ONE OF THE ONLY TWO AIRCRAFT FITTED WITH THE LEOPARD ENGINE WAS THE HAWKER
HORSLEY IN 1926

THE COUGAR DID NOT AS FAR AS RECORDS SHOW POWER ANY AIRCRAFT

ONE AIRCRAFT ONLY FITTED WITH TWO HYENA ENGINES WAS THE ARMSTRONG
WHITWORTH AW ~~XXI~~ IN 1933

ONE AIRCRAFT ONLY FITTED WITH TWO DEERHOUND ENGINES WAS THE
ARMSTRONG WHITWORTH WHITLEY II IN 1939

ONE OF THE MANY AIRCRAFT FITTED WITH CHEETAH ENGINES WAS THE
AVRO ANSON IN 1935

ONE OF THE MANY AIRCRAFT FITTED WITH JAGUAR ENGINES WAS THE
NEU PORT NIGHTHAWK (THE FIRST RAF AIRCRAFT FITTED WITH A STATIONARY
RADIAL ENGINE) IN 1922.