



COMPARISONS

- of the twin-engine helicopter types available to police air support in the Spring 2005.

Including the following types...

Agusta A109 - Bell 412/427/429/430 - Eurocopter EC135/145/155 - Eurocopter BK117C - AS365N3 - AS355N - MD900 Explore

H/c Type	Rotor Diameter	Fuselage Length	Fuselage Width	Ground Clearance	Fuselage Height	Height Overall	Option Engine 1	Option Engine 2	Weight Empty	Weight Max TO	Weight Useful load	Cabin Cabin L	Cabin Cabin W	Cabin Cabin H
A109E	11m	11.45m	1.62m	0.4m	3.10m	3.50m	PWC206	Arrius	1570kg	2850kg	1280kg	2.1m	1.61m	1.28m
A109G	10.83m	11.65m	1.64m	0.4m		3.44m			1655kg	3175kg		2.3m		1.28m
B412	14m	14m					PT6T		3079kg	5398kg	2318kg	2.34m	2.43m	1.24m
B427	11.3m	10.94m		0.41m	LS 1.93m	3.49m	PWC207		1581kg	2722kg	1441kg		1.5m	
B429														
B430	12.8m	13.4m					RR250		2397kg	4092kg	1685kg	2.59m	1.5m	1.45m
EC135	10.2m	10.20m	1.58m	0.4m	3.35m	3.55m	Arrius	PWC207*	1490kg	2835kg	1265kg	3.06m	1.5m	1.26m
BK117C1	11m	9.91m	1.60m	0.35m	3.85m	3.85m	Arriel	LTS101*	1645kg	3350kg	1595kg	3.02m	1.49m	1.28m*
EC145	11m	10.19m	1.73m	0.446m	3.25m	3.45m	Arriel		1792kg	3585kg	1713kg	3.44m	1.54m	1.27m
AS365N3	11.93m	11.63m					Arriel		2301kg	4250kg	1949kg	2.2m	1.92m	1.4m
EC155B	12.6m	12.73m					Arriel			4800kg	2217kg	2.5m		1.58m
MD900	10.32m	9.7m	1.62m	0.38m	3.66m	3.66m	PWC207		1486kg	2835kg	1349kg	1.91m	1.45m	1.4m
AS355N	10.39m	10.93m	1.87m	0.39m	3.14m	3.02m	Arrius		1436kg	2600kg	1164kg	2.0m	1.65m	1.10m

**

FIGURES DO NOT INCLUDE THE EFFECT OF ROLE EQUIPMENT AND ARE PRIMARILY BASED ON AVAILABLE MANUFACTURERS SOURCES.

** It is clear from such as the endurance figure that you cannot have everything. Where 'the book' claims 5 hours endurance for the AS355, in the police role it is generally accepted that 40 minutes is a more realistic figure. Nonetheless the figures of around 3 hours shown for other more modern types are far more attainable than that AS355 figure.



ir

Cabin	less	Max.	Performance predictions				Claimed	Usable	Claimed	Ex-factory	Ex-factory	Law Enf.	EMS	World
Cabin V	less bag	Seats	HIGE	HOGE	Max cruise	Ec. cruise	Endurance	Max Fuel	Range	Price \$	Price £	Complete	Complete	Features
4.9m3	0.95m3	8	5060m	3600m	285kph/154kts	254kph	5h 05m	668kg	839km	\$3M				SPIFR
6.5m3	0.95m3	8	4350m	2850m	288kph/155kts		4h 33m	644kg						SPIFR
6.23m3		15	3109m	1585m	226kph/122kts	226kph			652km					
		8	4938m	4237m	252kph/136kts	233.5kph	n/a	n/a	654km	\$2.2M				VFR SPIFR
		9	3459m	2667m	250kph/135kts	237kph			650km					
5.1m3	1.3m3	8	1520m	2190m	256kph/138kts	249kph	3h 20m	536.4kg	660km*	\$2.55M	£2.1M	£3M		SPIFR
5m3	n/a	11	2500m	1280m	250kph/135kts	231kph	3h	558kg	540km			£3M		SPIFR
6.04m	1.32m	12	2130m	1460m	245kph	243kph			670km					
5m3		13	1900m	1550m	277kph/150kt	271kph			819km					
6.8m3		14			266kph/143kt	253kph			831km					
4.89m3	1.38m	8	3353m	2743m	248kph/134kts		3h	489kg	561km		\$3M	£3.2M	£4.2M	SPIFR
3.0m3	n/a	6	2050m	800m	224kph/121kts	215kph	5h**	577kg		\$1.95M				SPIFR

realistic figure.