



when diving with flaps down. The machine has been developed into the S.M.86, which has a higher performance.

Mr. Folland advocates the adoption of a super-fast unarmed single-seater dive-bomber and maintains that such a machine could be made at least as fast (with reduced factors at the start) as an interceptor fighter despite the fact that it would have a range of 1,400 miles. One would presume in view of its cleanness (estimated top speed 470 m.p.h.) that some extremely efficient form of diving brake would be needed; possibly a reversible-pitch type of airscrew would be used in addition to aerodynamic brakes.

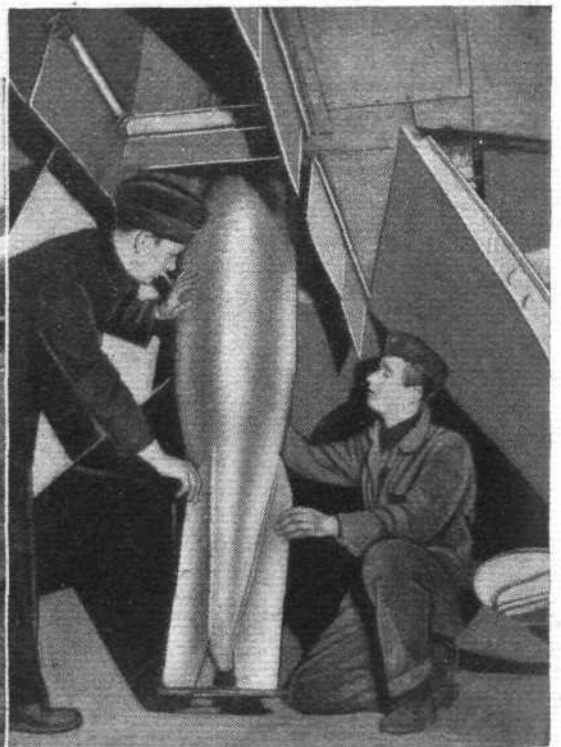
Outstanding among the two-seater dive-bombers is our own Blackburn Skua which is fitted with special hydraulically operated speed-reducing flaps. When fully depressed these limit the diving speed to about 220 knots (255 m.p.h.).

**Dive-Control**

Exhibitions of "dive-control" have also been given in public by two other foreign dive bombers, one a version of the Fokker G-1 and the other the Junkers Ju 87. As there is no airscrew in the nose of the Fokker the problem of guiding the bomb clear of the structure is simplified and aiming facilitated. For normal horizontal bombing the

On the left are Fairey Battles of the R.A.F. in the act of "peeling off" from an echelon formation to deliver a dive-bombing attack.

Many of the Continental bombers have vertical bomb stowage. Below on the left a Heinkel He 111K is seen being "bombed up," while on the right a large projectile is being persuaded into the bomb cell of a Ju 86K.



**Dive-Bombers**

Designation of Aircraft	Span	Wing Area	Wing Loading	Gross Weight	Disposable Load	Engine Type	Cooling	Rated Power	Max. Speed	At-tained at	Climb		Service Ceiling	Typical Armament	Progress
											To	In			
	ft. in.	sq. ft.	lb./sq. ft.	lb.	lb.			h.p.	m.p.h.	ft.	ft.	min.	ft.		
<b>GREAT BRITAIN</b>															
Blackburn Skua	46 2	312	21.8	6,811	1,321	Bristol Perseus XII	A	745	225	6,500	—	—	20,200	5 rcmg	OP
Hawker Henley	47 10 1/2	342	26.4	9,050	3,350	Rolls-Royce Merlin II	L	990	300	17,500	19,680	15	29,000	2 rcmg	IS
Fairey P.4/34	47 4 1/2	346	25.4	8,787	2,382	Rolls-Royce Merlin II	L	990	284	17,200	—	—	29,600	2 rcmg	IP
<b>AMERICA</b>															
Bell BG-1	36 0	353.8	17.3	6,641	2,821	Wright Cyclone F56	A	755	206	11,300	—	—	24,950	2 rcmg	AO
Brewster XSBA-1 (138)	39 0	259	23.16	6,000	2,000	Wright Cyclone G...	A	750	285	—	—	—	—	2 rcmg	IP
Curtiss SBC-4 (Helldiver 77)	34 0	317	18	5,710	1,544	Wright Cyclone G3	A	840	235	9,800	—	—	25,700	2 rcmg	IS
Douglas DB19	41 6	318.6	20.5	6,527	2,025	P. and W. Twin Wasp Jr.	A	750	223	—	—	—	25,000	2 rcmg	IS
Vought SB2U-1 (V.156)	42 0	305.3	21.3	6,500	2,000	P. and W. Twin Wasp Jr.	A	750	257	—	—	—	28,200	2 rcmg	IS
<b>GERMANY</b>															
Blohm and Voss Ha.137	36 7	252.8	21	5,313	1,320	Junkers Jumo 210	L	680	205	6,560	13,120	9	22,960	2 rcmg	PA
Junkers Ju.87	45 4	344	26.7	9,200	3,000	Junkers Jumo 211	L	940	240	—	—	—	25,000	3 rcmg	IS
<b>HOLLAND</b>															
Fokker G.1	54 1 1/2	384	27	11,243	3,637	Bristol Perseus X	A	1,460	300	—	19,680	11	29,000	5 rcmg	IS