

Top Secret

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METEOR AIRCRAFTMETEOR I

At Encl. 1A is a report on the operational and technical performance of Meteor I aircraft from G.C. No. 616 Squadron which has been forwarded by Headquarters, A.D.C.B., without comment.

2. It will be seen that the Meteor I at present suffers from various technical limitations which considerably restrict its use operationally.

3. I understand from D.O.R. that the present technical limitations imposed on the Meteor I will not be removed, and the fitting of long range tanks to this Mark is not contemplated because production of the Mark I is limited to a total of 20. The Meteor I is therefore, operationally restricted to :-

- (a) 15,000 ft. in view of aileron overbalance above this height.
(b) An endurance of 40/45 minutes.

4. The following figures of speed and rate of climb of Meteor I and other types are interesting :-

<u>At 10,000 feet</u>	<u>Meteor I</u>	<u>Spitfire XIV</u>	<u>Mustang III</u>	<u>Tempest V</u>
Rate of climb in ft. per minute	2,500	4,400	3,600	2,900
Speed, m.p.h.	430	405	405	402
<u>At 15,000 feet</u>				
Rate of climb in ft. per minute	2,250	3,700	3,000	2,750
Speed, m.p.h.	436	415	425	411

From these figures it will be seen that while the Meteor I is faster than the other types, it is considerably inferior in rate of climb.

5. With regard to the future use of the Meteor I, it would seem to be most suited for low attack and high speed photo reconnaissance, but its limited endurance is a disability in the latter role.

6. Now that flying bomb attacks are confined to air launchings at night the Meteors are no longer required in an anti-Diver role. Nor are they required in A.D.C.B. at present for interception. They might be useful in T.A.F. despite their present limitations, but the number of aircraft is limited.

METEOR III

7. The first Meteor III is due to be produced in September 1944, while a further 2 are expected to be available in October. Thereafter production is at the rate of approximately 9 per month to the end of February when it increases. It is probable therefore, that one squadron could be equipped by the end of the year.

8. From the 50th aircraft onwards, these aircraft will be equipped with extra tanks amounting to 100 gallons, whilst from the 73rd onwards

they will be capable of taking the 180 drop tank. Using this tank the operational endurance will be improved to 2.45 hours.

9. The first 40-45 Meteor III's will be equipped with W.29/23 engines. Subsequent aircraft will be equipped with the W.29/37, which gives an improved rate of climb and speed.

Meteor III equipped with W.29/37 Units - 4,600 lb. Static Thrust

	Rate of Climb	Speed
Sea Level	3,150 feet per min.	440 m.p.h.
10,000 ft.....	2,500 " " "	430 " "
20,000 ft.....	2,000 " " "	420 " "
30,000 ft.....	1,300 " " "	415 " "
40,000 ft.....	400 " " "	417 " "

Meteor III equipped with W.29/37 Units - 2,000 lb. Static Thrust

	Rate of Climb	Speed
Sea Level.....	3,975 feet per min.	465 m.p.h.
10,000 ft.....	3,250 " " "	476 " "
20,000 ft.....	2,500 " " "	483 " "
30,000 ft.....	1,700 " " "	482 " "
40,000 ft.....	750 " " "	466 " "

10. As regards the employment of Meteor III aircraft, as far as can be foreseen at present, I suggest they could be suitably employed in the following roles :-

- High altitude interception against the Me.262 or other enemy jet or rocket aircraft.
- Low level ground attack, but it should be fitted to carry bombs.
- Photographic reconnaissance.
- Short distance bomber support where opposition from enemy jet or rocket aircraft is likely to be encountered.

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