

129.

12th December, 1939.

S. 46499/E.19(b)

SECRET

100 Octane Fuel - Issue of.

Sir,

With reference to your letter No. F.C. 15447/76/E.Q.2., dated 7th instant, I am directed to confirm that 100 octane fuel is approved for use in Hurricane, Spitfire and Defiant aircraft, and state that issue will be made as soon as the fuel is available in bulk at the distribution depots serving the Fighter Stations concerned. Issue of this fuel to certain units in the Bomber Command will, however, take precedence over the units equipped with the above mentioned types of aeroplanes.

It will be appreciated that from an operational point of view it is essential that supplies in bulk at distribution depots should be available before general use commences and that it is not possible to state a day on which 100 octane fuel will come into use in all the approved stations. The date on which the fuel may be brought into use depends upon the rapidity with which (a) supplies in bulk can be put down at distribution points, and (b) bulk storage could be made available at the relevant stations.

In regard to (a) above the Petroleum Board have been instructed that storage in bulk at certain distribution points is to be arranged with the least possible delay and tanks *at* these points are being "run down" to provide the necessary accommodation.

P.T.O.

The Air Officer Commanding-in-Chief,
Headquarters,
Fighter Command,
Royal Air Force,
Stanmore, Middlesex.

The point ~~at~~ (b) in para 2. has been a matter of some concern. You will readily understand that to transfer the considerable quantities of other fuels which would be surplus to requirements if 100 octane fuel were to be brought into use immediately, is both uneconomic and undesirable.

It is proposed, therefore, that storage space for 100 octane fuel at stations shall be made available by the consumption of the D.T.D. 230 fuel already in stock. When a tank in the installation becomes empty, it is to be re-filled with 100 octane fuel which is to be demanded from the Petroleum Board under the arrangements already prevailing for other grades of fuel. This process is to be repeated ~~only if~~ all the accommodation allotted to 100 octane fuel at a station has been filled. When this has been done, the use of this fuel in aeroplanes for which it is approved should commence. The question of the issue of 100 octane fuel to non-operational stations for visiting aircraft will be considered later. May it be stated what quantity or quantities are considered to be necessary for this purpose.

I am to state, for your information, that the 100 octane fuel is "coloured noticeably green".

I am, Sir,

Your obedient servant,

(Sgd.) G. H. LINES

Director of Equipment.