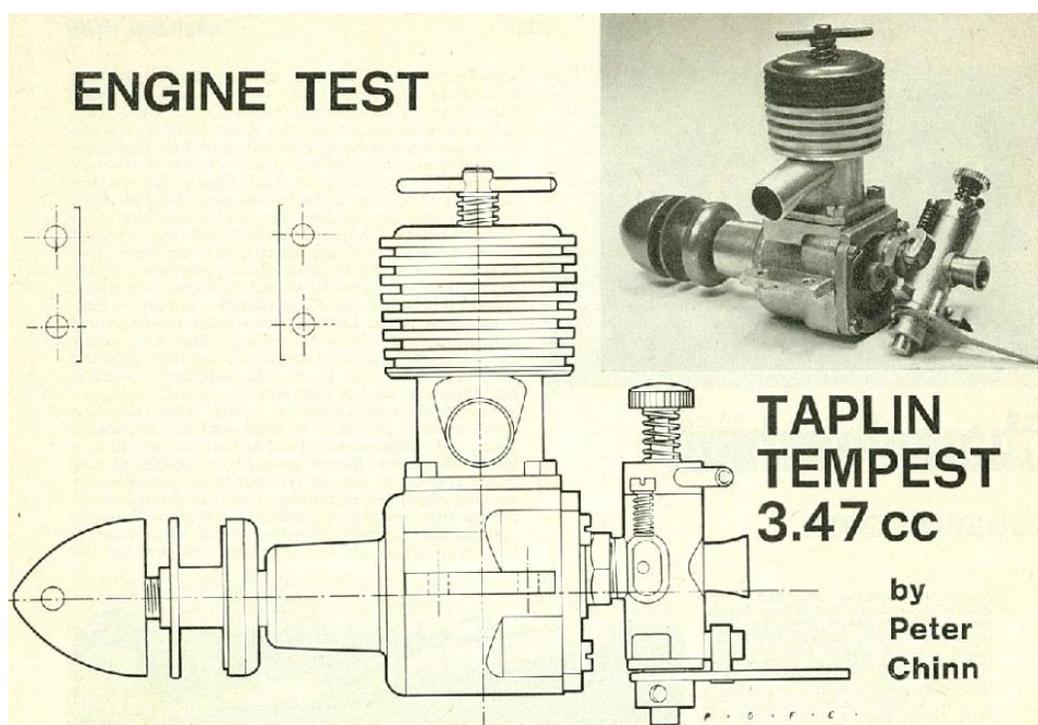


The Collectors Journey Episode 16 – by Diblick

Taplin Tempest/Hunter

Most modellers will be familiar with the twin-cylinder diesels produced by Colonel Taplin that were first introduced as a commercial proposition in 1959 with a 7cc capacity and subsequently enlarged to 8cc. They were durable, easy to start, economical and throttled well, but rather heavy for aircraft use. However, in 1970 Taplin introduced a single-cylinder variant known as the Tempest that was produced by Dinton Engineering Ltd. This 3.47 cc diesel had all the design features of its bigger 8cc twin in that the screw-on cylinder heads could be easily removed to facilitate replacement of air-cooling fins with a water jacket; the propeller-driver was similarly removable to be replaced with a nice chromium-plated brass flywheel, and the relatively complex Taplin throttle featured on the twin was incorporated:



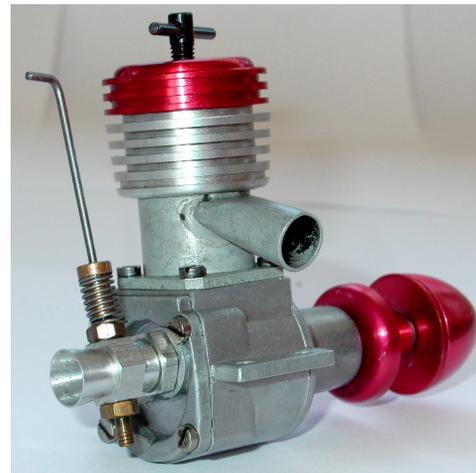
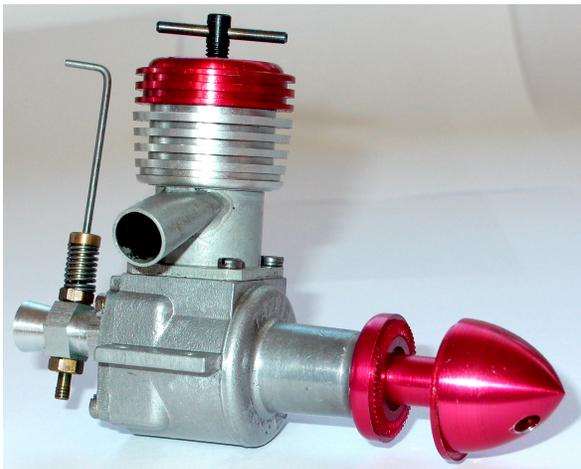
Cylinder bore was 0.657 in which, combined with the stroke of 0.625 in gave the nominal 3.5cc capacity; weight was in excess of 8 ounces – rather heavy for aircraft use. Peter Chinn tested the Tempest in *Aeromodeller*, September 1970 and recorded a power output of 0.26 bhp at about 6500 rpm which compared quite favourably with 19 glows of the time, although these peaked at much higher rpm. He reported that the engine could efficiently swing big propellers and had quite good throttle response provided the idling period was kept to no more that about 30 seconds. Encouraged by these findings, Diblick parted with the required moneys in his RCS days and purchased one: what a disaster! As supplied, the engine was distressingly tight and the contra-piston firmly stuck in the bore at the slightest provocation; throttle response was non-existent and the throttle arm, while being in the right position for the side-ported twin, had a sideways action when mounted at the rear of the Tempest – not very convenient! Things did not improve after a nominal 30 minutes running so the wretched object went back to Dinton at Margate with a not very complimentary note.

However, given that the power output was no better than a 19 glow, why did one want a Taplin Tempest? Well, Diblick had always a soft spot for diesels, but the Surbiton air-cooled ED Hunter offering of the time was, if anything, worse than the Tempest turned out to be so the latter seemed, on paper at least, to be attractive.

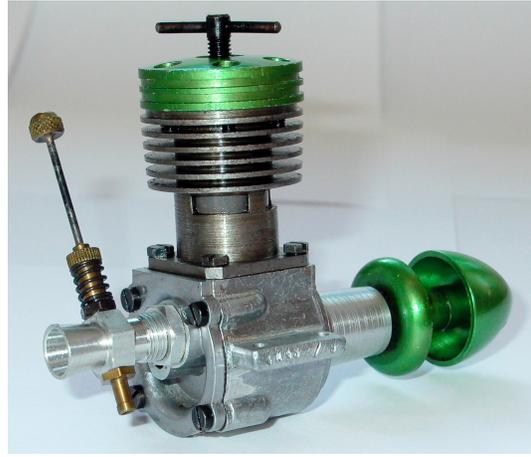
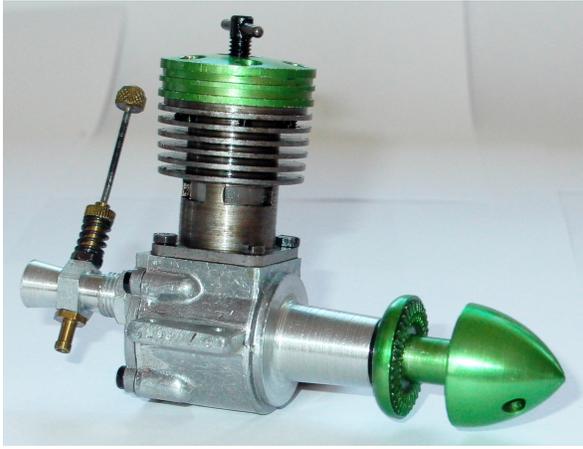
The original ED Hunter had gone out of production in 1962 and this is probably a clue as to why the Tempest came into being, it being far better as a marine engine where weight is less of a consideration than for model aircraft. It would seem that most Tempests were sold in water-cooled form, but even so the contemporary evidence points to the fact that less than 200 Tempests were made, so they are rare today as evidenced by some of the prices realised on EBay.

But the story does not end there. In 1983, Michael's Models of Finchley announced the availability of a "replica" Taplin Tempest at a cost of £36.95, these, as it turned out, being assembled from genuine Taplin parts that had been acquired by a well-known engine dealer not a million miles away from Surrey. No Taplin carburettors were available so a simple choke tube and spraybar unit was substituted; unlike the original Tempests which had a serial number beginning with "S" engraved on the base of the crankcase, these were not serialised.

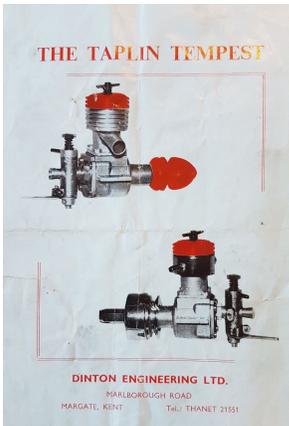
The MM Tempests are not strictly replicas as all the parts are original, and it would seem that quite a few of them were sold. Now eBay can be a place for bargains with the usual "Buyer Beware" caveats, but earlier this year a seller in Denmark offered a "new" Taplin Tempest, described as a replica, for a "Buy it Now" price of \$79.00. Worth a punt thinks Diblick who paid up and after a few days received the following in a plain brown box:



This turned out to be a really nice engine that runs with all the attributes Peter Chinn had ascribed to the original, with the exception of the throttle of course! Now, there is more than a similarity between the Tempest and the last of the "original" ED Hunters, often known as the "short shaft" variant:



In fact, one could be excused for thinking that the Tempest was in fact a re-engineered ED Hunter; the bore and stroke are nominally the same as is the rear disc induction system and inlet timing. The exhaust port is circular in the Tempest to match the soldered-on stub pipe rather than a bifurcated slot as in the original Hunter, but the port area is pretty much identical, the transfer ports are, like the Hunter, formed as two shallow flutes on the cylinder wall opposite the exhaust and again timing is similar. However, the big difference is to be found in the main bearing.



The Mark 3 Taplin Twin used a combination of an inner ball race and an outer needle roller bearing at the front, and this arrangement is likewise to be found in the Tempest which appears to employ the same front shaft as the TT. This is a much better arrangement than the single ball-race and plain bearing of the ED Hunter, being more rigid and potentially offering lower friction as well as longer life when a heavy flywheel was on the end of it. So why did Taplin make the Tempest? The last original ED Hunter was a good engine but had been out of production for about 8 years. Was there a market for a replacement that would please the model boat fraternity and at the same time make a slightly more modern interpretation of the Hunter attractive to aeromodellers?

Whatever the thinking, the Tempest did not achieve the volume sales anticipated for it and hence its rarity today. The example here took a long time to be hunted down at an affordable price!