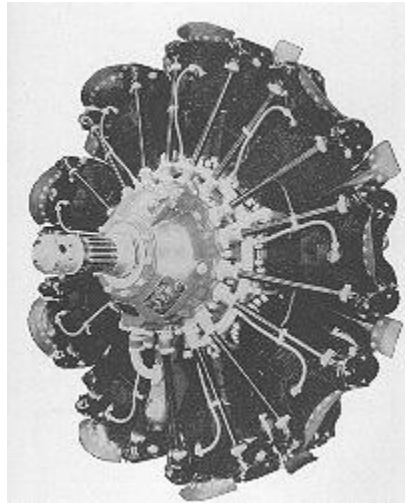


**Revised and Updated: Wright Cyclone R-1820 Engine – Resin & Brass –
1/48th Scale Tecnics by Ned Barnett.**



The Wright Cyclone – the R-1820 – was one of America’s most widely-used aero engines. Cyclones served on every B-17 except the first prototype (which had a Hornet aero engine), as well as every SBD Dauntless/A-24 Banshee and at least some versions of the C-47, the Grumman Wildcat (the Cyclone powered both the earliest G-36 for France and Martlet I for the RAF/FAA, as well as the last production FM-2 “Wilder” Wildcat), and the Curtiss Hawk 75/P-36. Finland in particular flew Cyclone and Wasp-powered Hawk 75s in the same units – no doubt a nightmare for the mechanics, but it made sense from an operational standpoint, since that country was cut off from the source. After the war, late-model versions of the R-1820 powered the T-28 trainer and other notable aircraft – a list of all the aircraft that flew with the R-1820 Cyclone would be too extensive to list, and the list of British aircraft that were underpowered because they didn’t use the R-1820 – such as the Blenheim – is very nearly as extensive.

In addition to the many uses of the R-1820 Cyclone, there were licensed versions of this engine produced in the Soviet Union that powered many of their radial-engined fighters, bombers and transports – and there may have been unlicensed versions available as well (I’m still checking this out – the Cyclone seems so ubiquitous that its appearance as the powerplant of choice among countries having no commercial ties with the US is hardly surprising). From a modelers’ point of view, knowing that other countries used knock-offs of the Cyclone make a great after-market kit of this formidable powerplant even more useful.

Early versions of this remarkable engine – such as those that powered the earliest B-17s and commercial DC-3s – produced about 750 horsepower at best altitude; late-war and post-war versions, such as those in the “Wilder Wildcat” (the General Motors-built FM-2), produced nearly twice that horsepower – 1450-plus horsepower on the same 1,820 cubic inch displacement. The name says it all: “R” for Radial and “1820” for its displacement (internal volume of all the pistons, together) in cubic inches. The R-1820 was a nine-cylinder single-row air-cooled radial, with a greater frontal area than the similarly-powered 14-cylinder twin-row R-1830 Twin Wasp (which was used to power the B-24, many DC-3s and some of the Wildcats, among many other famous aircraft).

There are many excellent websites that feature photos of the R-1820 – but one of the best recent print-publication sources is the Squadron-Signal “Walk Around” of the SBD Dauntless. There are many superbly-restored (museum-quality) SBDs currently available, and both the color and the B&W photography of the Dauntless’s uncowed R-1820 Cyclone engine will give you both a taste for the potential of a super-detailed engine and the color/painting references you need to make this engine authentic-looking.

In-line water-cooled engines were usually hidden behind streamlined skin panels – they can’t be seen in models unless you open the panels for a maintenance diorama. However, radial engines are open to the front for cooling – unless the propeller has a streamlining spinner (such as is found on the Brewster Buffalo or Hawker’s post-war Sea Fury), the engine details are “out there” for all to see. In 1/48th scale, this can be quite noticeable, which is why so many modelers go to so much trouble to super-detail kit-supplied engines, or to go searching for quality after-market items.

If you need a Cyclone engine and don’t want to add the ignition harness and other details, Tecnic offers an exceptional alternative. Their 1/48th scale resin-and-etched-brass engine is little short of superb. Try as I might, I can’t find any resin pinholes or blemishes in my sample – and the etched brass is finely detailed and delicately to scale, which is a good trick for an ignition harness. As with all resin items, the molding block is a relatively massive affair – you’ll need a skilled hand with a razor saw to separate the engine’s components from their mold-pour blocks.

A word of caution – when you buy this set, be sure to count the number of engine cylinder blocks you get – there should be 10 (giving you 20 cylinders). This extra count is because of the way the cylinders are molded in pairs on a single pour-block. There is one exhaust pipe between each pair of cylinders (but each cylinder needs its own exhaust pipe – which is why Tecnic doubled up on the cylinder pairs). Mine came with just five pairs – enough cylinders for the engine, but only half enough exhaust pipes. However, Meteor Productions is very responsive: if you come up short, drop them a line from their website (www.meteorprod.com) and they’ll rush you the replacement set.

In all likelihood (though I’m tempted to use it in one of my soon-to-be-built 1/48th scale SBD Dauntlesses), this particular after-market engine kit is going into my conversion of the old Monogram F4F to an FM2. I have an ancient resin conversion set (its origins long shrouded in memory’s mist) that I begin building in 1987 on the kitchen table in our house in Tampa (and continued on another kitchen table in Atlanta later that same year – I moved a lot in 1987 – don’t ask). I put aside that conversion before I finished it, waiting an engine worthy of the rest of the kit – and now, just 20 years later, I can move ahead and finish this antediluvian conversion. Or, I could forget the whole thing and put this engine into a new, state-of-the-art FM-2 kit (there’s one on the market I’ve been eyeballing for some time, and I don’t doubt it looks better than even a superb conversion of the old Monogram kit).

Of course, I’ll probably finish the conversion instead (I can build the better kit later – waste not, want not, eh?). To do that right, however, I’ll also have to completely junk the cockpit and landing gear and replace them with after-market items (it’s amazing how far our hobby has come in 20 years!), but I’ve always been a Wildcat fanatic, so updating this as-yet unfinished conversion is no burden – and this Tecnic resin/etched brass set is perfect for its intended use. Since the rear facing of the Wildcat’s engine is visible through the landing gear opening, I’ll need those extra cylinder pairs (and exhaust ports) – for most cowed radial engines, they’d have to be invisible, but of course, I chose the kit that demands the most detail, front-and-back.

My bottom line is this: I have at least a dozen 1/48th scale kits of planes that use the Wright R-1820 Cyclone – including the B-17 (four engines – and it’s high on my list since I got Eduard’s remarkable “Big Ed” after-market set for the Monogram/Revell B-17G), as well as the C-47 (two engines) and a host of single-engined Cyclone-powered birds (the T-28 leaps to mind, but there are many, many more). At this rate, I may wind up keeping Tecnic in business all by myself, just from purchasing enough of these after-market gems to dress up all those kits.

