

MEADOW FLYER

The Newsletter of the
Oxford Model Flying Club

<https://oxfordmfc.bmfa.uk>



Ray Mahlström's Cartoon-Scale *HP Dart Herald*
by Mike Stuart

April 2021

In This Issue

P.2	Chairman's Chat	Bob Lee
P.3	The Editor's Bit	David Lovegrove
P.3 / 5	Membership Report	Simon Burch
P.5 / 6	OMFC Rule Changes	Simon Burch
P.6 / 9	Dime Scale Anyone?	Andy Blackburn
P.9 / 11	Emails To The Editor	Various
P.11 / 15	A Tale Of Two Heralds	Mike Stuart
P.16 / 17	Radio Assist - A New Class for us	Bob Lee
P.17 / 18	Hints and Tips	MF Staff
P.18 / 20	Calling All Smokers - R.20 – Rocket-Fuelled Fun!	Charlie Newman
P. 20 / 21	One-Model Group Build: Spencer Willis Sweet P.30	MF Staff
P.21 / 22	Sweet P.20 - Construction and Trimming	Andrew Longhurst
P.23 / 25	Paper Dummy Engines	Chris Brainwood
P.25 / 27	My Build Blog - Chris Foss <i>UNO WOT</i>	Ian Barrow
P.28	Wanted - A Webmaster!	Bob Lee
P.28	Useful Websites	MF Staff
P.29	WhatsApp Group Update	MF Staff
P.29	Operator IDs - A Reminder	MF Staff

Chairman's Chat **Bob Lee**



Well, the government now has a roadmap for getting out of lockdown and the Club now has a plan for easing our way back to our normal activities. By the time you read this, hopefully we may be flying on the Meadow, in groups of up to six people, blessed with clear skies and light winds.

As you will see in the list of events later in this edition, all being well we will be able to resume meeting and flying on the Begbroke field from the May Club Meeting(19th) and, hopefully, also our regular meetings on the 3rd Wednesday of the month.

We have booked the Begbroke hall for the afternoon of 3rd July and by then, with a bit of luck, all the COVID restrictions will have been lifted. For those of you that were at the 50th anniversary gathering two years ago, this will be a similar format. A chance to meet up again in person for a good chat, to bring along all your lockdown builds to display and to be able to fly suitable models on the playing field, as well as enjoy a BBQ. More details on this nearer the time, but get the date locked into your diary now, we are planning on running this from 12.00 noon to 4.00pm.

We have held two meeting now on Zoom, which have been a good success. This was a new venture and I must admit that I found the idea of hosting a Zoom meeting of 27 people a bit daunting at first but soon got the hang of it. Meeting on Zoom did give members living further afield the chance to join in, and it is possible that we can incorporate such events into our future meeting plans.

In this edition I have written a piece about the new class of model we have introduced, which is 'Radio Assisted Free Flight'. I'm sure that many will welcome this addition.

Multi-rotors (a.k.a. drones) have been a challenge for us, mainly from the point of a suitable competency test to ensure that they are flown safely on the Meadow. Again, there is a piece about this later.

As for my own activities, the *Miss35* is almost ready to go, but I have yet to bench run the engine. I'm waiting on some warmer weather before I annoy the neighbours with the noise. I will need some time to run it in and get familiar with it before I venture onto the Meadow; even then I will be looking for some help and support!

I have also made a bold move and bought a 'foamy electric glider - a *Multiplex Funnystar*. It's ready to go but waiting for the next stage of (release from) lockdown to come in before I head to the Meadow. I'll do a full review for the next Meadow Flyer after it's been flown.

My other project is the '*Meadow Lark*', which is a *Frog Tomtit*, enlarged from 18 inches span to 30 inches and electric powered. The wings are built and the fuselage is on the 'drawing board' (OK, Draftsight) at present.

That's all from me for now; hopefully be meeting some of you soon.

Meadow Flyer

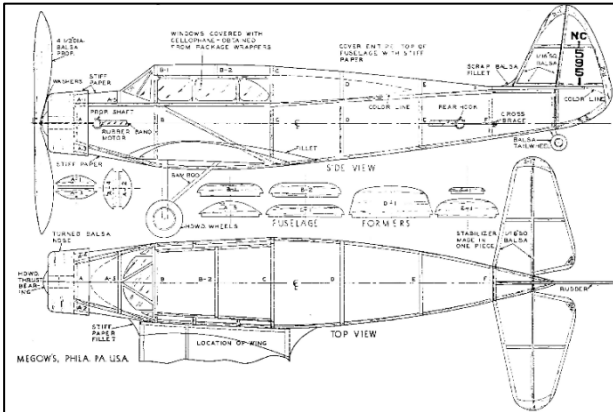


DIME SCALE

Andy Blackburn proposes a new (to us) class of freeflight competition

Like many people of a certain age, I cut my aeromodelling teeth on an obsessive diet of Keil Kraft Flying Scale kits; I used to average about one every three or four weeks; with a few exceptions (Auster Arrow, Piper Super Cub, etc.) they didn't fly very well simply because they usually turned out to be too heavy – this was partly because of the large amount of wood in the design, and partly because the wood supplied was far too heavy. And of course, that ridiculous excuse for a propeller didn't help.

Anyway, towards the end of the 1970s somebody in the UK started importing Comet kits, and some of them were a bit of a revelation; the structure was, well, sparse at best (often entirely 1/16" square) so even if the wood was heavy they still didn't weigh a lot, and the models usually flew well. From memory they did have a half-decent propeller - or at least one that was better than the equivalent Keil Kraft and Veron offerings.



Fragment of a typical mid-1930s rubber-powered kit plan (Megow Models Fairchild 45)

Many of these lightweight designs were older kits of 16" span or less and are now known as "Dime Scale" kits, because they originated in 1930s U.S.A. as cheap 10 cent kits to feed the craving of America's aviation-obsessed youth. Times were hard and since each kit sold for only 10 cents, manufacturers (such as Comet and Megow's Models in the U.S. and Aer-O-Kits in the U.K.) couldn't afford to put much balsa in the box; it was a cut-throat market and as a kit manufacturer, you wanted the buyer to spend all his/her pocket money on *your* kits, not on your competitors' kits – so you couldn't increase the price or you'd lose sales, nor could you put more balsa in the box as it would eat into the small profit that you got from each kit.

Flying Aces Club Dime Scale and Simplified Scale

Fast-forwarding several decades, there are now some "Dime Scale" rules published by the Flying Aces Club (FAC) in the U.S. for models representing full scale airplanes (aeroplanes) built prior to December 31, 1949. The rules have a fair amount of latitude when it comes to changes to "Traditional" Dimers – wing spars can be added, the rear motor peg can be moved, wings can be made one-piece (many of the original designs had wing halves cemented to the tissue fuselage!), tail surfaces can be moderately enlarged and so on.

The rules also include clauses about drawing up your own Dime Scale plan (Pseudo Dime Scale) – there are some twee rules about the entire plan and parts having to fit onto one side of 11" x 17" + one side of 8.5" x 11" paper, but the essence of the thing is that it should be *simple* – few ribs and longerons, no really small wood sizes, no laminated outlines, box girder fuselages and only enough detail to capture the essence of the subject.

If your Pseudo Dime Scale plan is seen as too complicated by the Contest Director on the day, you may be required to fly it in the "Simplified Scale" class instead. My own view is that we fly on

Meadow Flyer

a small, windy island so a degree of tolerance should be exercised if people choose to add a bit of strengthening here and there.

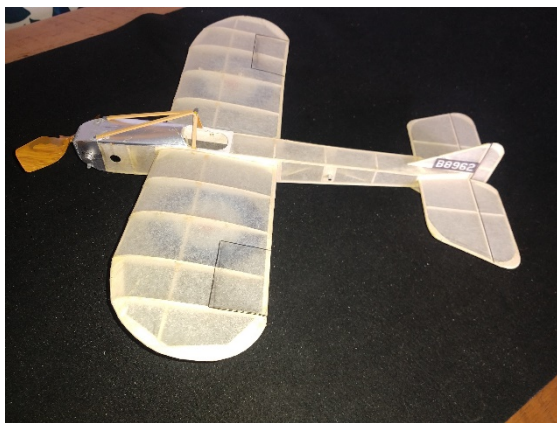
Plans

A fair few older Dime Scale models are available on [Outerzone](#), many of them fly extremely well; Mike Stuart's website (<http://www.ffscale.co.uk>) has a downloadable plan of a [Dime Scale Chilton DW.1](#) by Clive Gamble, which is begging to be converted to the far-more-attractive D.W.1a and is reputedly capable of flights of well over a minute in still air.

Kits

Dime Scale kits are available from some suppliers in the U.S. and Canada but not all of them are shipping overseas yet because of the COVID Pandemic.

Easy Built Models in Canada is one of those who are not yet shipping overseas but when things get back to normal, the [Beech Staggerwing](#) is a very good kit that regularly wins contests, including the 2019 FAC Non-Nats Dime Scale event.



Dave King's B.A.T. Monoplane Dimer

[Volare Products](#) in the U.S. have half a dozen short kits including the B.A.T. Monoplane which has a huge wing area and a simple fuselage; there's a nice video of the last half of a trimming flight on the Volare Products website, claimed still-air times are very impressive.

Dave King built one from the kit and reports that "the kit was brilliant, the pieces fitted together beautifully" and "It came out at 29 grams ready to fly, and flies indoors really slowly".

[Hummingbird Model Products](#) is run by Bernard Guest in Canada, and has seven rather nice Dime Scale short kits that can be ordered with prop kits and printed tissue; I have one of the Grumman Skyrocket kits and I have to say the quality is really excellent – the printed tissue is a work of art on its own. I quite fancy the Hawker Hurricane which is based on a re-drafting of the old Comet kit by Stew Myers, the tissue colour scheme is for Bob Stanford-tuck's Hurricane Mk 1. As far as I can see, Bernard has resumed production of kits but he's a one-man cottage industry with a "proper" job, so it might take a few weeks for kits to be produced.



HMP Dime Scale Hawker Hurricane

Dime Scale Competition

So, I'm wondering if people might be receptive to an informal Dime Scale competition? If we pick the right (calm-ish) day it can be held during an afternoon, or maybe an afternoon of general flying followed by a couple of rounds of Dime Scale in the evening?

Static scoring is fairly basic in Dime scale, being mainly a check of the model against the plan and the maximum wingspan (16") which produces a go/no go decision. I would envisage allowing people to enter models built from a recognised Dime Scale or Pseudo Dime Scale plan or kit, but

Meadow Flyer

I'd drop the static judging requirement and just have a go/no-go entirely based on the wingspan (maximum 16").

Dime scale is only scored on flight performance (maximum of three flights), although there are a maximum of 15 bonus points available based on the configuration (e.g. Piper Cub/Auster would get 1, Spitfire/bf 109 would get 10, Beech Staggerwing / SE5a would get 15)

CRITERIA	POINTS	CRITERIA	POINTS
High wing cabin/shoulder wing monoplanes	0	Low wing	10
Landing gear down (includes fixed)	1	Floatplane	10
Compound curved canopy made from clear flat sheet material	2	Biplane	15
Parasol monoplane	3	Triplane	15
Mid-wing	5	Multi-engine	15
Canard or Tandem wing	5		

Bonuses are cumulative, up to a maximum of 15 points.

The way it would work is that flyers submit their flight times (only whole seconds, so 35.83 seconds round down to 35) over the course of the afternoon, say between 14:00 and 17:00 (times written in pen by the timekeeper), the only requirement is that you can't time your own model!

Normally there would be three official flights, but if it's an evening event (say between 17:00 and 19:00), we should probably only have two timed flights for reasons of limited available time. Sorting out the winner is then simply a matter of adding the flight and bonus times together and then re-arranging the scores in order of First to Last. The only equipment required is a) somewhere to put the score sheet, and b) a go/no-go jig to measure the 16" maximum wingspan.

Calling all Smokers – R.20 is back
Charlie Newman

Some years ago, when Rapier rockets were new on the scene, I had a good play with them and quickly realised that they were far better than the old Jetex rocket motors: no more burnt, grubby hands, no more endless misfires, no more health-threatening asbestos washers. By comparison, they were chalk and cheese. It also occurred to me that they would make a good basis for a new small field duration competition, along the lines of the P30 or P20 rubber classes.

As the large Rapier L3 and L4 motors ceased to be available, and had been quite expensive, I chose the specification to be centred on the L2 family of motors – the standard L2, the L2 LT, the L2HP, plus a 20-inch dimension limit. i.e., the model had to be capable of being placed, fully assembled, into a 20" x 20" box.

Laurence Marks and I knocked up some trial models and had a happy, smoky time flying them and we included the new R20 class at the Dreaming Spires event on Port Meadow. This attracted about 6 entries first time around, including Chris Strachan, who quickly became the man to beat.

However, over the years, interest in R20 declined with the lack of supply of motors from the Czech Republik. Until now, that is.



Early R.20, builder unknown

The brilliant news is that a Polish businessman - Piotr Ribnik - has developed his own range of impulse motors which puts us back into smoky fun again! He does his own L2 motor that your esteemed editor has tried with good results, and Simon Milan has suggested the resurrection of R20. This we will try this summer, subject to the dreaded virus.

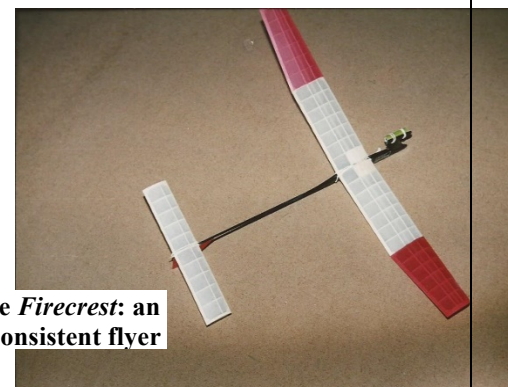
So, this is the set-up for the proposed R20 event:

- Permissible motors: any L2 , Rapier or Polish L-2L, any Jetex / Jet -X 50
- only one motor per airframe
- maximum dimension 20 inches wingspan and overall fuselage length
- 5 flights to a 1-minute Maximum



Winner of the first R.20 comp. (Colin Judge)

I drew up an R.20 called *Firecrest* (right) and this plan was in the *Meadow Flyer* about 15 years ago but it was never a patch on an old Ian Dowsett design called the *Fizzlebug*, which appeared as a full size plan in *Model Aircraft* magazine, 1954. The It has a super glide and it is very prone to flyaways! The only



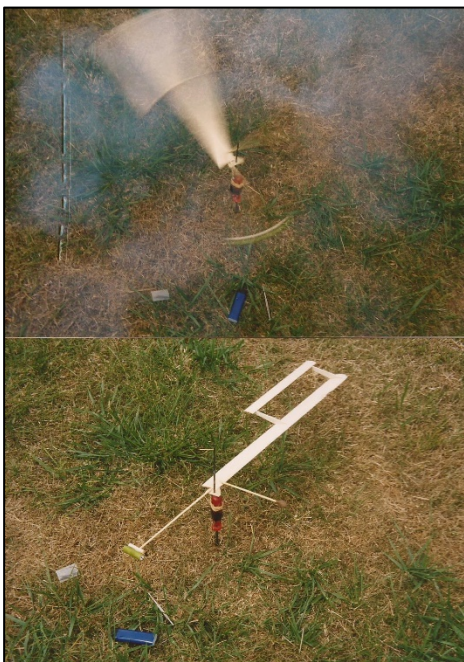
The *Firecrest*: an inconsistent flyer

Meadow Flyer

possibility for a D/T is to add a swinging weight system. Email me if you'd like a copy of the plan.

The design is all sheet, though I have used carbon HLG booms sometimes. With all R20s, indeed most impulse-powered models, it is vitally important that they are built absolutely true, as under power, at the end of the run, things can happen pretty quickly! Also, we found out the first time around, that although these are small models, it is not really a small field class: they can cover a great deal of space very quickly, and, because of their small dimensions, they quickly disappear on the ground on the Meadow. Do remember to put some effective high viz colour on the model. And once you've launched, start chasing straightaway!

I am afraid that I came to regard them as disposable, even if they did have a carbon boom. After all, once the motor has died, all that is left is a burnt-out cardboard tube! However, do keep a couple of these in your flight kit for trimming purposes. When trimming a new model for its glide, this should always be done with a dead motor mounted in the model. The fresh motors weigh considerably more than a spent one, and this much be considered and allowed for when trimming. The R 20 models are similar to chuckies inasmuch as they are small and cheap (well, the airframes are!) but offer fascinating challenges. So, why not build a couple of Fizzlebugs and rejoin the smoking community this summer!



On the left are images of a "McCutcheon Wing" that is bit too big for the R20 spec, says Charlie, but he claims to have won an R20 comp with a smaller example!

Apparently, they have a fantastic glide. He also says they are so minimal as models, it isn't worth putting your name and address on them . . . (not sure I agree with that - Ed.)

Laurence Mark' *Phoenix* design had a carbon boom and pop-up tail D/T.

At the time of writing we are not 100% sure if the Dreaming Spires event will go ahead, but if it does, and there is enough support, an R.20 comp. could be a part of the day's fun. For those who would like to take part but don't have any left-over Rapier L-2s, we hope to be able to secure a stock of Tender L-2Ls direct from the manufacturer. Please contact the Editor to register your interest.

Paper Dummy Engines For Small Scale Models



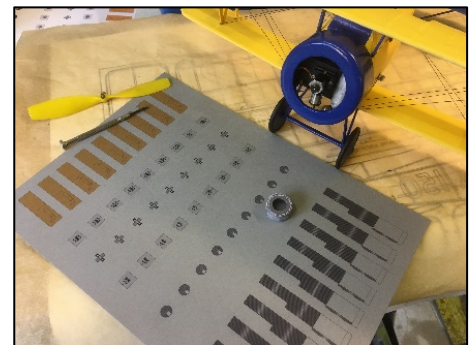
My introduction to scale modelling began a quite few years ago as a child in the 1970's with the wonderful thing that was the Veron Tru-flite kits. They were available in most toy and models shops: yes, model shops - remember those? The red and yellow packaging was always very tempting for my pocket money and I built a few with varying degrees of success - success was measured in feet and inches of the length of the flight. For those who don't remember, these were small rubber powered model kits, many of which have now been revived by the Vintage Model Company and, with laser cutting and decent rubber, they can be made to fly very well.

Fast forward a few years and after a gap in aeromodelling I find myself once again building some small-scale model aircraft. One thing I always found tricky was making a dummy engine to fill the often cavernous hole at the front of many of the popular WW1 designs. That's probably why I liked the inline engined *SE5A* so much but I recently came across a series of printed paper engines after buying a kit from Dave Cowell at Aerowerkes in the USA that can be scaled to fit these small models.

Dave kindly sent a CD with the kit that included a whole heap of hints and tips . . . and a folder full of PDF prints of paper dummy engines. Amongst them was a *Le Rhone*, which was ideal for my first lockdown build – a *Grahame-White Bantam* from 1919. Pete Fardell had started a Walt Mooney 'cook up' on the internet forum :-

<https://www.hippocketaeronautics.com> (HPA)

and the *Bantam* had been a project of mine for a while . It had stalled somewhat due to lack of drawings, so it was easy to adapt it to this build.



The *Bantam* was an attempt by the Grahame-White factory at Hendon to cash in on the burgeoning private aircraft market using the mass of demobbed military engines. Unfortunately, the design proved somewhat slow and unstable. They only built three and one wedged itself into a hangar at Hendon during an aerobatic display and was written off, just a few months after it was built. Luckily the pilot survived. Contemporary reports noted the aircraft, with its short wings, large tail and tiny fin, was very difficult to handle; perhaps not the ideal qualities for a free flight model, but at least it's a nice colour.

Meadow Flyer

My model is a slight enlargement from Walt Mooney's Peanut plan to 15" span so I could fit a Telco C02 motor. The Le Rhone PDF print looks to be about 1/32 scale, so I re-sized it to 1/16 scale for the Bantam.

To make the cylinders, I printed the PDF onto ordinary printer paper and wound them around some dowel to form the shape and stuck it together with Pritt Stick. The rest of the engine was printed onto some thin grey card, which seemed to give a reasonable look of an aluminium engine.

The crankcase had the lower cylinder cut out to clear the Telco and simply slides over the top. The cylinders are all stuck to the crankcase with Canopy Glue, which dries clear. As I was using thin card, the smaller details are simply cut out and left as single sided pieces, rather than folding them over as the kit implies. The intake tubes were just stuck to the crankcase again with some canopy glue.



As the Bantam has a cowling that covers the valve gear there was no need to bother adding that detail to the engine. The engine is held to the model simply by trapping it behind the cowl, which itself is held on by magnets. After a bit trimming of the cylinders by trial and error I had a reasonable fit. As a finishing touch the intake pipes were painted with some copper effect for that characteristic *Le Rhone* look.

The great thing about these paper kits is you don't have to use all of the kit, the small details added to a more conventionally

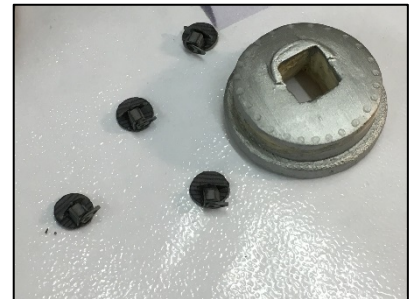
made balsa dummy engine can work well too.



For the DPC (dpcmodels.homestead.com) *Sopwith Pup* from Aerowerkes I used just the cylinder heads and intake tubes from the kit and made the rest from Balsa. The

crankcase also forms the nose block on this rubber powered model, with a square hole for one of Derek Knight's KP Aero adjustable nose buttons (kpaero.com). The cylinders are balsa dowel that has been

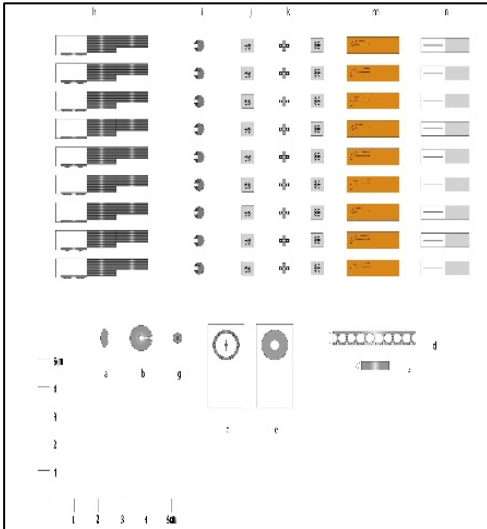
painted black and wound with some metallic thread. A tiny blob of cyano is enough to hold the thread in place.



The cylinder heads and rockers were again printed onto some thin grey card and stuck together with canopy glue. With much of the engine hidden behind the cowling they were fitted to the exposed cylinders at the bottom of the engine only. Pushrods are bristles from my workshop broom painted black and again the intake tubes were given a coat of copper metallic paint for that *Le Rhone* look.

The effect from these paper kits enhances the front of these rotary engines models very well I think even if only the details are used. They are a bit fiddly to make; cutting out the tiny rockers is particularly fiddly, but worth the effort.

Meadow Flyer

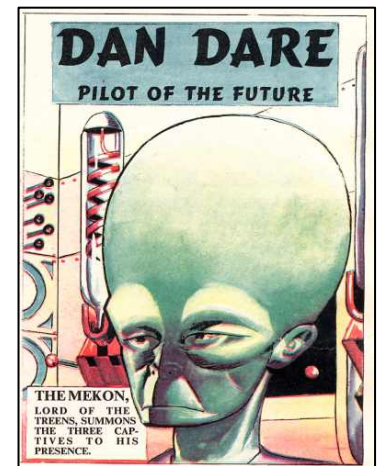


I have a range of WW1 engines in this PDF form. I think they are all 1/32 apart from the Le Rhone, which I have re sized to 1/20 and 1/16 scale so they would need enlarging. This could be done simply at the printing stage in by printing at 200% or whatever fits your model.

In addition to *the Le Rhone* there is a *Clerget* (ideal for a VMC Camel or Triplane), the German *Oberursel U1, Ur2, UR21a* and *Ur21b* as well as an inline *Mercedes IIIa*.

If you would like to try these paper kits email me at squirrelnet1@gmail.com and I'm happy to pass on a folder of the PDFs.

All Done And Dusted



The images above represent the two principal sources of light relief in the Editor's otherwise rather staid reading life. Those *Eagle* and *Beano* comics were always eagerly awaited! *The Dandy* didn't quite have quite the same pzazz: it was okay, but not quite as good.

Anyway, I loved the *Eagle's* wide spread of pictorial content (the prolific Ray Mahlström was a contributor). I laughed like a drain at the *Beano* characters' sheer silliness; couldn't get enough of Dan Dare's unceasing battles with the Mekon, his implacable, bluish-green, inter-galactic adversary. Mystifyingly, this evil genius floated in mid-air on a sort of mini-surfboard (a drone?) from which he commanded his evil henchmen, the Treens. Incidentally, hjs face reminds me of someone, but I can't quite put my finger on who it is . . . any ideas?

The Bash Street Kids - Spotty, Plug, Smiffy, Fatty and the rest - were always up to their necks in trouble with Teacher, Janitor and Head. Priceless. Owing to a vague similarity with my surname, one of the Bash Street gangs' member's names devolved upon me and stuck with me until the end of my schooldays: can you guess which one it was?

David