The man of a million models

Have you ever seen a square wheel? No, well they are around somewhere and were invented by Ray Malmström it seems believe it or not. Among his many amusing claims was, "Any fool can make round wheels, but it takes a genius like me to make square wheels that work". What modesty but typical of Ray, who many people believe really was a genius in his own field of aeromodelling – the small, cheap to build, ingenious and even bizarre models which all flew well indoors and outside. What sort of person was Ray really like? Here Peter Hoskison who was a close friend of Ray for many years tells us something about him.

The dictionary defines the word "legion" as a great number or a multitude. That is one of the best definitions of the numbers of friends and contacts that Ray Malmström could count as his close associates. The ancient Romans included up to 6,000 soldiers in their military legions. The modern army of aeromodellers who remember Ray must be that ancient military number with a good few 000's added.

Ray was a man of many things to many people. He has been variously described as a genius, an elderly youth somewhere between 15 and 50, a nice old man, a character and even by some as a bit eccentric. To those who knew him all the descriptions probably fit. But to



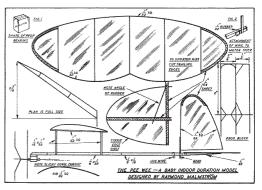
Mountie Mk II. Also appeared in a Solarbo balsa advert in Aeromodeller.

those who knew him really well he was a true friend and adviser, always ready to give a helping hand and a pat on the back as a well done for a new modelling effort and an encouragement to reach for even higher levels.

Ray was the first to admit that he disliked office work and record keeping – so the exact total of models he designed is unlikely ever to be known. But the total runs into hundreds and covers all aspects of aeromodelling from the frankly ridiculous to the superb. All his designs had one common factor – they all flew well in the hands of their builders of any ability.

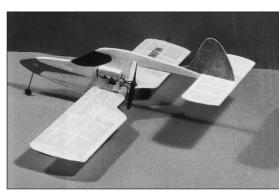
His model designs were often caricatures in the true meaning of the word and had, as he once explained, "characteristic traits exaggerated in a ludicrous way". You might say some of the models looked a bit odd. He did this to such good effect that most aeromodellers have built one or more of his designs at sometime or other. Ray's designs were simple, yet different and were aimed mainly at the younger modellers. The majority of them could be built from the scraps left over from building conventional models - thus the cost never suppressed the desire to construct a Malmström design.

The first of the many One of Ray's earliest published plans was of the Pee Wee baby indoor duration model of eight inch



Ray's first published plan. Full size appears on page 15. The first of hundreds of designs.

wingspan and appeared in the pages of Aeromodeller during August 1940. Other plans followed quickly and they appeared at a time when indoor flying had really taken off, as sometimes outdoor flying was difficult during the war years. Many of Ray's models were aimed at RTP (Round the Pole) flying which was immensely popular among aeromodelling club members of the day, because it could be enjoyed in a restricted area. One of his most popular outdoor models of the period was the twin-engine and



Round-the-pole flying was hugely popular among Club members. Ray's early design – pusher type model.



Coaxair. A pusher-puller rubber powered model with propellors. A bit of a handful to wind both motors, model flew well, particularly in breezy conditions.

twin fuselage Kestrel which was capable of high speed flights in excess of half a minute. This was followed soon afterwards by his popular Merlin Mk I a twin engine fighter bomber along the lines of some of the legendary full size aircraft of the day.

Ray wrote in describing this model, "an attempt to create a model that follows, without being a copy, the general layout of an aircraft that has won battle honours in every field of war. I believe that future development and research, eventually will be directed to the production of models that are in real truth model aircraft". How right Ray was and he predicted all those years ago,



Mandy, control line model, Mills .75. Picture taken by Terry King in 1949.

today's great growth of interest in scale modelling.

During the late 1940's and early 1950's Ray's inventive genius saw him producing dozens more designs - almost a case of "You name it, I'll design it". With the astonishing growth of model flying around the British Isles during the late 1940's and the 1950's he widened his design portfolio to include power free flight models, control-line and competition rubber models. He steadfastly refused to design anything for radio control -asection of the hobby he declared loudly to be "unnatural". Although he had a brief flirtation with diesel engines - he never touched "those messy old glo-plugs" - and never stopped using rubber power, because of its simplistic appeal to beginners at whom so many of his designs were aimed.

A bit crowded

Another practice that Ray developed in the plans published by aeromodelling magazines around the world was to show important parts full size, despite the constraints imposed by the small area of some of the magazine pages. His layouts in the restricted pages of magazines are masterpieces of this art. But he was not happy sometimes with having to crowd so much on to a small page. He once remarked to some of his Club colleagues that he would not like having to build from plans which were crammed into a small page area. "If I don't like building from those plans, what must the poor old beginners think?" was his frequently voiced comment.

Ray not only contributed to many magazines world-wide, he produced four books for the Eagle comics organisation dealing with model aircraft, model boats, model cars and model spacecraft. He also produced a number of independent books. All these are much sort after by collectors nowadays – and fetch quite substantial prices in the specialist bookshops. Ray did all the writing, photography and drawings for these publications at the same time as keeping up a stream of new designs.

His space age contributions led to a series of models printed in colour on the back of an international breakfast cereal company's products. Even today his daughter Elizabeth remembers, "He used to drag us around Tesco and the Co-op every weekend to admire his handiwork. We had so many cereals in the kitchen at home".

In addition to his design output Ray drew scores of cartoons to illustrate magazine articles – and to point the readers' eyes to these he invented Fliar Phil a cheeky little chappy who turned up seemingly



everywhere and went on to become Ray's most famous worldwide trade mark.

Many of Ray's models sported a three crowns motif on their wings like the Swedish national full size aircraft roundels. This was in remembrance of his Scandinavian background.

Ray's a laugh

As well as being one of the world's best known aeromodellers, Ray was a dedicated joker, humorist and speechmaker - often difficult to get him going but much harder to get him to stop! Building and flying to him was a serious business. Seeing Ray's delight when a new model performed well and his depression when it gave difficulties then you could not doubt that models were all important to him. He was not selfish with that pleasure or depression as he was always delighted to see one of his designs going well for someone else and mortified when they did not do so.

Ray's models may be easy to fly – but his name was not always easy for a newcomer to get to grips



1940. In the RAF, proud father with Annie. Ray soon had another armful – as a gunnery expert on Hawker Hurricanes.



One of the few pictures taken of Ray with a radio controlled model – an Imp designed by Terry King. Ray attempted radio only once, flying a Dandy built by Alan Hunter. Ray threw the transmitter to the ground after two minutes declaring, "It ain't natural".

with. He often laughed that he had been called - among other things -Mr Milestone, Mr Millstone and Mr Macalmstrone. His grandfather was a Swedish bootmaker who married an English wife and set up a business in London. Ray's father was also business minded and started up a small toy shop in the Southsea area of Portsmouth. During the 1920's he stocked a range of flying toys including some card model aircraft. It was the sight of these brightly boxed models that caught Ray's eye and started him into what was to become a life long love of model flying. Ray eventually went to art school where he continued his model building - and soon his thoughts turned to full size aviation.

A fascinating aspect of his early modelling, which showed a business like approach inherited from father, was his offer to the pilots of the airline operators flying between the Isle of Wight and the Channel Islands. He made and sold to the pilots models of their Wessex, Fox Moth, DH 84 Dragon and Monospar aircraft. With the money he raised he took flying lessons on Gipsy Moths with the Portsmouth Aero Club.

Bang on

When Second World War broke out in 1939 Ray joined the Auxiliary Fire Service. It was during this period he designed his Pee Wee indoor model which was test flown in the fire station grounds. The design was later published by the Aeromodeller magazine, to become the first of literally hundreds of published designs.

After graduating from art college he became a junior art teacher at Kendal Grammar School. He started an active model club at the school – but his tenure there was cut short when he was conscripted



Ray readies one of his rare freeflight rubber contest designs at a club contest meeting.



Sir George Cayley's man-carrying glider of 1853 presented the perfect challenge to Ray to build yet another out of the rut design. The model flew for a short distance.

into the Royal Air Force where he learned to be an armourer. He remembers fondly an incident which occurred while he was stationed at North Weald, working on a Hurricane IIC armed with four Hispano cannons.

An Air Ministry photographer visiting the station to record some morale boosting pictures was allowed to sit in the pilot's cockpit of the Hurricane. Ray lingered nearby while the photographer lined up his camera and accidentally caught some of his photographic equipment around the control column and pressed the gun firing button. The cannons went off with a resounding roar, only inches away from Ray's ears leaving him stone deaf for three days. He, like Queen Victoria, was not amused.

A few months later the world of aeromodelling nearly lost one of its all time greats yet again. Ray and some of his armourers crew were loading small bombs into the fuselage bays of a Mosquito fighter bomber when one of the 25 pounders became detached and fell – on top of Ray. He was only bruised and later commented, "The Germans were unable to kill me off, but the RAF had two jolly good tries".

Friday at Impington

When the war finished Ray found a job as a junior art teacher at

Impington Village College next to Cambridge. He remained there for more than 40 years and eventually rose to be head of art studies at the college.

It was here that his aeromodelling career as we know it today really took off. He founded a model flying club, rejoicing under the name of Model Air Squadron – and Ray appointed himself as Commanding Officer. He once recalled, "We decided to meet on Friday evenings because the young members had the whole week-end to do their college homework. Nobody had to get up in the morning so we could fly until late in the evening. I charged them three pence (just under 2p today) and put the money in an old OXO tin. When that was full I bought a tin of Cadbury's cocoa, drank it and put the three penny pieces in there instead. The money helped to keep us in bits of balsa and tubes of cement".

The club was eventually renamed as the Impington Village College Model Aeroplane Club – a title it retains with pride to this very day. But the annual subscription is now a good deal more than Ray's original three penny piece! Ray received letters from all over the world during his very long connection with the club. Some were from former pupils and many were from people he had never heard of but had built and enjoyed flying his designs. Occasionally he would receive parcels from abroad containing kits of his designs. Most of them were "pirated" versions, simply copied without anyone's permission from Ray's published plans. One such parcel came from a Russian modeller.



A happy snap of Ray with some of the Club members around the late 1960's. They are, left to right, Dick Newling, Ted Gregg, Ray, Tom Collins, Derek Camps and Chris Hinson.

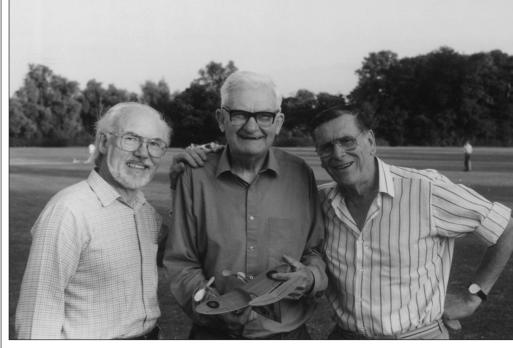
Ray related, "It was a darn great box that contained just a large slab of rock hard balsa wood. The instructions said anyone attempting to build the model – it was one of my small indoor creations – should cut the wood to suit from the block of balsa. I thought the whole thing was a bit of a cheek really, somebody pinching my design like that. At least they managed to spell my name correctly on the plan. I suppose they found that bit easy with a name like mine".

Fliar Phil's story

When the Club celebrated its 40th anniversary in 1986, the Aeromodeller magazine asked Fliar Phil to tell his story of his creator – and here it is. If you can detect the hand of The Master himself behind Fliar Phil's writings, well you might not be far wrong!

I was about 12 years old when my father, dear soul, succumbed to my repeated onslaught and bought me my first aeroplane kit. And what a kit! An all-cardboard affair, designed, I feel, by someone who had little aeronautical knowledge, but made up for it by an immense touching faith in the gods! It was supposed to build up into a fascinating little Wee Bee I Beardmore monoplane! Gosh, that cardboard resembled good quality sheet iron! Only a particularly evil smelling virulent variety of fish glue could hold it together.

My father, his sweat wreathing his bald but noble napper, did indeed get the fearsome airfoil section (?) to stick, but unfortunately, only to the backside of his trousers — this act of unquestioned dedication was achieved by accidentally sitting on it. The model was, in the light of subsequent efforts, a catastrophe that put World War I, the Wall Street crash and the General Strike rather in the shade. But bless its reinforced cardboard heart, it set me out on our great hobby of aeromodelling.



Ray with two of his greatest friends, Doug McHard and Derek Camps. Ray is holding the model Doug built for Ray's 80th birthday. The model is a twin engine Avenger – the plans of which were published in Aeromodeller during June 1943.

Early days included flying the first Warneford spruce and silk jobs and then on to that great design by dear much respected 'RIP', the Cruiser Pup, my model of which departed this life a couple of thousand feet up over Portsmouth Harbour, 12 minutes out of sight. Long flights with a Burd Thermalider (cost of kit three bob -15p) with a machine or saw cut balsa propeller, an introduction to the joys of scale with a Captain Page Racer, a Comet kit from a shop in Blackpool and a monstrous five foot span rubber powered Rearwin Speedster, another dreamboat from Burd. And it flew!

Recall the days when it was considered a sign of moral turpitude not to say indecency - to turn up on one's local flying patch with a Wakefield that sported less than a dozen sylph-like stringers, encasing its streamlined figure. Flew Copland's GB3 and Scott's Flying Minutes with success. Built Cahill's Clodhopper, an ugly brute, that tried ending its flights with some decidedly unfriendly telegraph wires which did absolutely nothing for its subsequent trim. Great streamlined days those - until Dick Korda wrote 'finis' to the streamliner syndrome with his slab-sided masterpiece.

About this time I helped to run the Portsmouth Model Airplane Club and founded the Kendal Grammar School Model Aircraft Club. There were lots of keen aerobods, but then yours truly and some of his senior pupils got mixed up with the RAF for a five year stint.

Head Master amused

Back in the teaching biz once more, founded the Impington Village College Model Aeroplane Club in 1946 and



A youthful-looking Ray Malmström poses with his Sullivan's 1938 Wakefield model. The original photo has no date on it but was probably taken a short while before Ray changed his model aircraft for the real thing after joining the RAF.

like the famous brand of whisky (thank you I don't mind if I do), the IVCMAC is still going very strong. I managed to get aeromodelling into the official curriculum and discovered what a help it was to both the bright lads and particularly to those whom educationists describe rather delicately as 'the less able'. There was nothing 'less able' about them when they got the feeling of balsa in their souls and the lovely reek of dope up their 'hooters'. Even the headmaster smiled as their gliders glided and their control-liners circulated and their free flight jobs, washed out most of the glass in the greenhouse of the gardening section! Now some of the lads of those days and since, are designing and building better than the 'ole man'.

So, I was beaten often and that was right and proper and gave me a lot of satisfaction. Good to see the younger generation taking up the challenge. Some say I can still give them a run for their money. Perhaps, or maybe they are just angling for a cuppa at my expense in the college common room!



The Maestro, as many club members called Ray, poses with his Hellstar equipped with a dropable "bomb".



A newly-built Cri Cri stands on the workbench in the study of the Malmströms' home at Harlton near Cambridge. The study saw the design, construction and even test flying of hundreds of Ray's designs.

Heck of a lot of memories contests, meetings, rallies, demonstrations, static displays and above all, the privilege of knowing some of the greats – P. E. Norman, Pete Wright (high speed and head gears), Bill 'Gipsy' Dean, George Fuller (Dixielander aloft). Rushy, Houlberg, Evans, Boys, Towner and those still prominently 'in-the-vigour', as the Chinese used to describe their warriors in battle. All of them aeromodellers who set standards and technical achievements for me and the rest of us lesser mortals, who alas, I could seldom, if ever, emulate but for whose influence I have been eternally grateful and indeed continue to be.

Smells of cement and dope

My cartoon period, not to be confused with Picasso and his Blue Period, for Aeromodeller and Model Aircraft was a lot of laughs. Cartoonists sometimes say they lack friends, but I never did a cartoon of an aerobod without making a new friend. This says a lot for the real friendliness of the aeromodelling fraternity, for some of my efforts could hardly be described as flattering.

The majority of Ray's vast design output was created in the study of his large house at Harlton near Cambridge, which he shared with Sheila his wife of more than 50 years. From the start of their long and happy marriage Sheila became used to the constant smell of balsa cement and dope wafting through every room of the house. Also she soon became used to the endless phone calls and stacks of letters from aeromodellers around the world. She rarely complained. Sheila took the line that no matter how much she or the family would complain, Ray would simply sit down at the drawing board and start designing another masterpiece.

In his late years his daily trips to fly his latest creation on the slopes of the large hill just across the road from his home and his weekly 25 mile round trip to Impington Village College became too much for him – but he remained in close phone touch with club members wanting to know how his creations were performing in their hands.

In the last few years of his life Ray and Sheila moved to Norwich to be close to their family. It was there that he died peacefully in his sleep just before Christmas 2001 at the age of 87. He often joked about "going to that great flying field in the sky". There is no doubt that the moment he reached there, out came his note book and pencil and he began sketching yet another design. It is just as likely that he has started a heavenly model flying club.