

HAMILTON MODEL ENGINEERING CLUB
Museum of Steam and Technology. 900 Woodward Ave.
Hamilton Ontario. Canada L8H 7N2
Meeting of April 18th 2006.

Mes Amis,

The next club meeting will be held on Tuesday May 16th at 7.30 pm. We have no guest speakers and will have to rely on our own efforts to make up an evening of interest. Wayne Walker hopes to bring along a 1956 Dodge pick-up truck he's restored, Alan Glover and Roy Elliott will bring us up to date on the library 's progress; and Doug Crawford has information on the proposed web site.

Thirty-four members and seven visitors attended the April meeting, where our guest speaker Mark Nye gave a most spectacular demonstration of gas turbine power.

Having blown up a hot piston engine Mark decided to concentrate his effort on turbines; his first attempt using an automotive turbo blower, with acetylene as fuel, worked so well he was hooked. We saw some good video and slide pictures of the stages he'd worked through, and other experiments carried out over a period of years. Obviously this was not a haphazard enterprise, the trials were carefully thought out, and good workshop facilities were available for components.

An ex-military jet engine is fitted into a boat that was parked outside near the canopy, and which Mark started and ran up to speed: by turning off the ignition then relighting after a few seconds delay, a cloud of vapour burst into flame to rival the Canada Day Fireworks. This boat can be seen on the water, for a few minutes by viewing a video film on the Internet at marknye@ca <<mailto:marknye@ca>> or nye@ca <<mailto:nye@ca>>

Another innovation, seen in the experimental stage, is a bio-turbine, fired by a wood furnace; this could be used as a power source in areas where liquid fuels are scarce. This was an excellent presentation, with technical and practical content, really enjoyed by everyone; the most obvious fun being for the builders.

Greg Vosper assisted Mark while making experiments and building engines, he fully acknowledged the help and effort put in by Greg. In our letter of thanks he was specifically asked to pass on our appreciation too.

Bert de Kat has made a cam grinder on the pantograph principle; this to finish grind a small pair of cams for an I.C. engine. The common method of milling a series of small flats, and blending afterwards, didn't appeal to Bert's scientific mind, resulting in a nice looking apparatus. Bert explained his arrival at a four to one enlargement template, done with a C.A.D. system, and showed the pair of cams, finished in one piece, on a single spindle, after roughing out on a mill.

Bert read out an E-mail he'd received from Paul Knapp, he and his wife have moved his collection of small engines, in twenty-nine showcases, from Phoenix to Denver Airport. This is a notable exhibit drawing a lot of admiration by waiting passengers; this is understandable, we've seen some of the showcases and contents in video form,

Another speaker, one we've seen before, Ian Habicher, son of Wolfgang, came along to tell

us of his Schreckler (?) Turbine. So far he has only the rotors and part of the casing done. The compressor wheel is made from plywood reinforced with carbon fibre, while the turbine is turned from solid metal, the blades formed by slotting then twisting to a constant angle. Final shaping is by using a Dremel tool. The use of carbon fibre aroused some interest; Ian secured one end of a thread to a grooved plywood disc using superglue, then wound on more until the groove was filled. More glue was added, it soaks in quickly, hardens rapidly, and the disc can be turned to size. Some interesting model possibilities here. Eh!

Harry Leedham brought in some drawing copies of early Rolls-Royce jet engines he'd worked on in Britain, he's loaned them to Mark Nye and speculates we may see an axial flow compressor turbine from that quarter. Other drawings were of cheapie jet engines intended for missiles, with only a thirty-minute life span. Harry was also the lucky winner of the show and tell prize draw.

Stating 'He's a bit of a steam nut,' Harry Savile went on to describe his progress so far in building Victoria, a horizontal single cylinder mill engine, of one inch bore with two inch stroke. Some improvements to the original Stuart Turner design have been made over a span of years, and Harry will add his own touches to these; he hopes to include a spinning ball type governor, and be running by June. Some wag from the floor is recorded asking, "June what year Harry?"

Our selected victim for keeping the Joe Newton Memorial Trophy dust free and polished was our president Carol Bristow-Savile by a massive amount of votes. Carol has served us for a few years now, with a grace and diligence, many other clubs would envy. A truly worthy recipient.

Richard Butterick was in hospital, due for triple by-pass surgery the day after our meeting. We all hope you're now a long way on the road to recovery Dick, and back with us soon. Norm Molloy tells me Jack Wheelton is also in hospital, so we send our best hopes for him too.

Please give some thought to how we can help with Franca's upcoming display of hobbies by the museum's users.

Your Scribe,
Anthony Grayson.