Where the Daleks were born

VERNON GIBB visits a science-fiction factory and takes a crafty look at the shape of things to come

PHOTOGRAPHED BY EVELYNE KANE

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N Saturday mornings the small boys of Uxbridge, Middlesex, tend to gather at the open gates of what at first appears to be a junk yard on the Slough Road, just out of town. Five-year-olds stand in goggling amazement. Older boys glance surreptitiously left and right about the yard, then dart in to touch—actually touch with their own hands—a monster made familiar by television or cinema.

Even local teenagers, in Carnaby Street gear and accompanied by "birds", pause in their weekend perambulations and glance into the cluttered yard, experienced eyes sorting out sections of Dalek; the antennae of a scrawled Zorbie, the nose cone of a space rocket.

For this yard is the "foryer" of Shawcraft, a firm of model-makers and innovators. This, in fact, is where the BBC Daleks were born.

Here, in apparently inadequate premises, monsters come and go week by week, veiled in tight security until their presence in our midst is dramatically revealed in an episode of Dr. Who or some nightmarish adult play or film.

All are manufactured in the cluttered workshops behind the yard. It is here that producers', playwrights' and designers' visions become concrete under the inspired hand of one Bill Roberts, late of Merthyr Tydfil.

It's all happening

Mr. Roberts retains the Welshness of the expatriate Celt. His voice is helped along by a lift that would do justice to Dylan Thomas. From an office like the bridge of a ship, high over the yard, he directs the complex and often frantic operations called for by directors with a half-visualised dream and a firm and irrevocable deadline.

His staff of 16 craftsmen often work late, sometimes all night, so that a monster, a spaceship, an elaborate working control panel, can be set up in the studio in time for final rehearsal.

"I don't really know how all this happened," says Bill, sitting at his L-shaped desk, his conversation punctuated by incessant telephone calls. "I started out with two partners making exhibition model aircraft for British European Airways and some other companies, models of all sizes and types. Then we started making other types of purpose-made models, all unique in their way, all commissioned for special jobs, and the thing just grew.

"My partners and I split up some years ago— I found it better to go it alone, less restricting, you know—and through various contacts the range of our products widened.

"We just made what we were asked to make; scale model buildings and technical models for export, educational exhibits, even X-ray machinery and medical equipment. It was a challenge all the time and everybody seemed pleased with our work.

"Some of the jobs were very tricky in the beginning. Of course, you learn as you go along and things get easier. One of our early commissions was for a mobiltron, a huge machine designed by Nuclear Engineering, of Greenwich, for the treatment of cancer by cobalt rays. The original weighed about 70 tons, and they wanted a desk-top model for sales promotion overseas.

"We eventually scaled it down, virtually a working model, to a weight of 15 lb. Nowadays—we like to think, in part at least, through our efforts— mobiltrons are used in cancer treatments all over the world.

"That led to other things. The Science Museum in Kensington has many exhibits made by us, including a complete family of viruses, magnified millions of times over.

"There is one downstairs under construction now, a tobacco-virus. It stands 10' high, and to give you some idea of the scale, if a cat was magnified to the same ratio it would stand with its front paws in Moscow and its hind legs in London."

"We have made models for Rolls-Royce and many other engineering firms, and about once a year the Smithsonian Institute, Washington, USA, one of the world's greatest museums, commissions a new exhibit from us. The first one they asked for was a 1/24th scale model of the famous transcontinental 'Nickel-Plate' locomotive."

The Planemaker

Soon the inevitable happened. Bill Roberts was approached by Pinewood Studios for model aircraft to feature in the air epic of World War II, Angels 15, starring John Gregson. Then came the Phyllis Calvert film, The Net, and this led to Bill Roberts' biggest job so far: a full-scale "mock-up" of a Vickers Vimy aircraft for the film, The Long Haul.

"It had a 67' wingspan," says Bill, "and stood taller than a double-decker bus. We installed two engines which allowed it to taxi realistically at 20 miles an hour. That was quite a job, we only had a shack at Iver, Bucks, at that time—we moved here much later—and it was too small to house even the parts successfully.

"So we built the aircraft in a field outside. It had to be tied down in sections in case it blew away. We spent what little spare time we had praying for good calm weather."

Then came a 40' model of the ill-fated Titanic for the Kenneth More movie, A Night to Remember, followed by a commission for 180 model planes varying in size from very small to 8' wing-span for another More film, The Battle story, Reach for the Sky.

"That was a tricky one," says Roberts. "We spent three days crashing one model effectively—the aircraft that was supposed to cost Kenny his legs."

One piece of aircraft mechanism has never pre-
sented any problems to Bill Roberts. Propellers.
He worked for some years as a prop-shaper at the
famous aircrew factory at Weybridge, Surrey.

Then came the ship period. Roberts made battle-
ships and cruisers for films like Sink the Bismarck,
and models up to 33" in length for Battle of the
River Plate, in which the star model was the Nazi
ship Graf Spee.
Following the American trade showing of Sink
the Bismarck, the American distributors remarked
about how the "stockshots"—old newreels—gave
the movie a feeling of authenticity. In fact, of
course, there were no "stockshots"; they were all
Shawcraft models filmed in a tank!

An astute man, Bill Roberts was not content to
make models just for the movie industry. He
became familiar with the general workings of a
studio and quietly produced an automatic film
processing machine, some 40' long, capable of deal-
ing with 300 colour films an hour.
The Rank Organisation commissioned three such
machines which are still in daily use.

Fibreglass and steel tanks of any size for the
treatment of metals, for film processing, industrial
models of all types, educational aids; Bill Roberts
makes them all in his smallish, overcrowded
workshops.

Monstrous orders

But it is the show-business side of his production
which is the most amazing. No Dr. Who pro-
gramme would be complete without a Shawcraft
contribution. Perhaps the most famous of all the
Who monsters were—and are—the Daleks.

Dreamed up by writer Terry Nation and designed
by Raymond Cusick of the BBC Design Team, they
were the first "monsters" in the Shawcraft library.
They were followed by the Zarbi—a sort of crea-
ture, actually articulated suits worn by actors
—and the more lovable Chumbleys.

"Working" instrument panels for space travel,
upon which lights flash and dials register electronic-
ally, are just part of Shawcraft's weekly chore.

Rockets of intriguing complexity, launching
pads, a scale model of the city of Troy—you name
it, and you will find it in Bill's workshops. Every-
things from a pterodactyl to a drinks machine and
accompanying chair for the BBC play Out of the
Unknown.

"Actually, there is a man inside the drinks
machine," says Bill. "It's cheaper that way. The
idea is this mastermind sits in a hydraulically
operated chair, which turns to a lounging coach
at a touch, and the drinks machine obeys his com-
mands, spilling whisky, gin or vodka into a glass,
adding ice and cordial and even using a swizzle
stick before passing it." A series of spouts dispenses the "liquor," there
is a chute for ice, and the "swizzle stick" operates
on a complicated mechanical arm.

Here, as in everything else, Roberts' keen atten-
tion to detail is evident. Detail and finish. The
finish on every product is impeccable. Shawcraft
models are obviously made to last.

What of the future?
"Well, I seem to have so many irons in the fire.
I just cannot predict which way things will go," says Bill. "But one thing is certain. While there
is a demand for monsters, whether they be from
outside space or under the sea, they will be born at
Shawcraft."

And next Saturday and every Saturday after,
the small boys and the bigger boys, and even the
fathers, will be glancing into the cluttered yard on
the busy Slough Road, hoping to get a preview of
what their home screen will show them.

But security measures are strict: all the pas-
ers-by can see are the familiar monsters of the past
... the Daleks, the Zarbies, and maybe a
Chumbley.∞  

In One Million Years B.C. American actress
Rasuel Welch looks like this. Now if Bill Roberts
had had a say...