September 1986 A Quarterly Publication of Ausglass The Australian Association of Glass Artists

Registered by Australia Post Publication No. VBH 227

VICTORIAN EXECUTIVE COMMITTEE MEMBERS

Ede Horton (President)

Note her change of address
11 Cochran Avenue, Camberwell, 3124. Telephone: (03) 882 7595

David Turner (Secretary) 143 Church Street, Brighton, 3186. Telephone: (03) 592 8462

Reg Loats (Treasurer) 37 Duncans Road, Werribee, 3030. Telephone: (03) 741 1103

Alan Steer (Cold Workshop Co-ordinator) 688 Mt Alexander Road, Moonee Ponds, 3039. Telephone: (03) 370 7682

Allan Crynes (Cold Workshop Co-ordinator)
"Battery Creek Farm", Yanakie Road, Fish Creek, 3935. Telephone: (056) 832 488

Pauline Delaney (Hot Workshop Co-ordinator) 79 Hobsons Road, Kensington, 3031. Telephone: (03) 376 4084

Carol Gibson (Convenor) 5/108 Nimmo Street, Albert Park, 3206. Telephone: (03) 699 1520

Julie Brand (Magazine) 76 King William Street, Fitzroy, 3065. Telephone: (03) 419 4727

Richard Morrell (Hot Workshop Co-ordinator) c/- Meat Market Craft Centre, 42 Courtney Street, North Melbourne, 3051. Telephone: (03) 329 9966

DESCRIPTION OF AUSGLASS

Ausgalss is a subscriptive organization with an annual cost between \$20 and \$30, depending on status. Subscriptions fall due on the first of January. For this annual fee a member will receive four newsletter/magazines per year, containing the most efficient dissemination of information that Ausglass can provide. Amongst the news is information regarding the summer glass conference which is held every two years.

EDITORIAL.

I must draw readers' attention to the delay of the last magazine, the reasons behind the delay, and how they relate to Ausglass in general.

By its very nature Ausglass must change Executive Committees (and hence States) every two years. This is advantageous as it distributes an undoubtedly heavy workload. The disadvantages lie in the inevitable disruption of information dissemination among Australia's glassworkers which occurs immediately following the change-over period. And information dissemination is surely the major function of Ausglass.

It has taken me a long time to finally get this magazine running relatively smoothly, and no sooner has this occurred than we pass Ausglass on to the next Executive Committee (and watch them stumble into the same pitfalls....).

It is precisely this reason which accounts for the delay of information about the "Glass in Public Spaces" exhibition. There is an enormous amount of organization required for a show of this nature, and if we were to do it a second time we would be aware of the problems. However, as it was, we were not aware of the problems and we can only hope that any individual who didn't find out about the show in time will understand. Honestly, we did our best.

On this same subject, there are two segments within the Conference timetable which will be entirely devoted to the future of Ausglass. It would be appreciated if members considered the question now in order to present constructive opinions at the Conference.

I ask you to please consider this matter seriously.

Julie Brand.

PRESIDENT'S REPORT

In line with past Ausglass Conferences, the Executive Committee intends to bring to Australia several quest artists to complement those resident in Australia. After asking people for suggestions as to those who could be invited, sending letters to these respective potential quests, and obtaining responses, we approached the Crafts Board of the Australia Council to help subsidise the travel fares of Michael Glancy and Susan Stinsmuehlen. We felt both these people would be versatile enough to conduct workshops and speak at the conference. The selection committee of the Australia Council were very enthusiastic about these artists and we have much pleasure in asking them to attend our biennial conference. Fred Daden, a glass technician and experienced teacher at the Royal College in London, shall be conducting an advanced hot glass workshop. Richard Morrell shall expand on this project.

Over the last 16 months, much time and energy has been spent obtaining grants and sponsorship. This is an involved procedure, yet the rewards will be of great benefit to Ausglass. To date we have received \$20,000 from T & K (an ACI company) to stage a National Exhibition to coincide with the conference, entitled "Glass in Public Spaces". A personal development award of \$5,000 will accompany this show.

We approached the Australia Council Crafts Board for an Organisation Project Grant specifically for the Conference, the aims being:

- (a) to bring two internationally recognised glass artists to Australia;
- (b) to employ a convenor to co-ordinate details and centralise administration of the conference and workshops;
- to provide documentation of all lecture papers, workshop data and general information;
- (d) to provide travel expenses for members in remote areas, and students.

We have been awarded \$7,686.00.

All the Executive Committee have been involved in this time-consuming process, particularly David Turner and myself. But the results so far have been very encouraging.

Victorian Ausglass has applied to the Victorian Ministry for the Arts to promote Ausglass through a poster at the time of the Conference, and an architectural glass workshop conducted by Doug Hansen (USA) and Lutz Hautschild (Canada) is mooted for May '87. We hope to be successful in this endeayour.

The Conference and Workshops have been geared to present a programme that challenges, stimulates, elevates and amuses all attending.

For any information, please contact Ede Horton, 11 Cochran Avenue, Camberwell, Victoria, 3124 Telephone: (03) 82 7595. Contributions to the Ozglass magazine are welcomed, in the form of copy and/or graphics. If the graphics are photographs, 8 x 10" black & white prints are requested. Slides will not do.

Thanks Editor.

TIME	MONDAY Themes:	TUESDAY Catalysts	WEDNESDAY Glass Perspectives	THURSDAY Architecture & Glass	FRIDAY Art/Glass
9.30-11.00		Outline of Conference Opening address by President 'Austrolian Glass – An Analysis'	Kiln Techniques	Resaurces: Craft Council of Australia Australia Council Architecturol Consider- ations in Glass; or Reviews of Hot Glass Papers	Five Bodies of Wark
11.00-11.3	0				
11.30-12.3	0	The Future of Ausglass	Personal Perspective OS Guest Speaker	Personal Perspective Flat Glass OSSpeaker	
12.30-2.00				Developing o Notional Callection – What Artists and Galleries Expect. Chair: or Panel: Art in Architecture	
2.00-3.30		Catalysts: The creative process, source af imagery, intellectual bases of work.	Trends in Cantemparary Interiars	Attitudes towards glass application in architecture, legislation of public art.	ANNUAL GENERAL MEETING ELECTION
		Chair: Panel:		Panel Architects/Artists	Future of Ausglass
3.30-4.00					
4.00-5.00	Registration 4.00–6.00 p.m.	Glass as a sculptural medium.	Eurapean & American Architectural Glass. Chair: Ponel: New Zealand survey.	Glass Presentation and Marketing.	Gloss Art – does it really exist? Chair: Ponel:
	9.00 p.m. PARTY Slides of members' work on caromat for continuous viewing throughout Can- ference and Workshop period.	6.00–7.30 p.m. Exhibition Opening National Show	6.00–7.30 p.m. Members' Shaw	5.00–6.00 p.m. Workshop Reviews	AUCTION Barbeque

HOT GLASS WORKSHOPS 1987

At a meeting of as many Hot Glass people as we could get together at one time, it was decided that the most practical thing a workshop could provide was a skills development program; a reasonable conclusion I feel.

To this end, we have arranged for Fred Daden from the UK to conduct a five day workshop in the week prior to the Ausglass Conference in January 1987.

Fred Daden was a master glassmaker for many years before taking up a position at the Royal College of Art in London. His experience at translating designs into finished work make him well qualified to conduct a workshop of the type we envisage.

Working on the surmise that one cannot learn to be an artist, but can acquire technique, each participant will be asked to produce a design which they would like to execute well, but is somewhat beyond their present ability. The aim is that by working directly with Fred on your own design, and by close observation of other participants working on their designs, we will all expand our vocabulary with the material.

To avoid the workshop becoming too rigid, there will be plenty of time available for more informal group work. The only criterion here is that whatever is being done should employ 2 or more people. The more the merrier!

Daily format will be:

9am–10am – Demonstration by Fred. 10am–3pm – Structured work on presented

designs 3pm onwards – Group sessions, ideas development.

The workshop will be held in 3 studios – Mike Hook's (Resolution Glass), Rob Kottenbelt's, and my own at the Meat Market. In this way we not only get to blow glass till there is none left each day (without worrying about melting overnight), we will also benefit from seeing different approaches to running a studio.

This workshop is only open to glass-blowers with some experience, estimated cost at this stage being \$150-\$200. To allow sufficient hands-on time, numbers are limited to twelve; first in, first served.

Hopefully this workshop will be very instructive and, just as importantly, a lot of fun too.

There will also be a beginners' hot glass workshop, intended for absolute first timers. The venue for this is undecided as yet, but more details on this as they become available.

Spaces are limited to 8 people, with several places already having gone. Again the first replies will get the places. Duration will be three days, cost about \$100.

All enquiries to:
Richard Morrell,
c/- Meat Market Craft Centre,
42 Courtney Street, North Melbourne,
Victoria, 3051.

PROPOSED WORKSHOPS FOR THE 1987 AUSGLASS CONFERENCE (1st Amendment)

(1) Flat and 3-Dimensional Glass Design

Susan Stinsmuhler from the USA will give a design-based workshop exploring the expressive potential of glass in transmitted (windows) as well as reflected light (wall panels). Emphasis on serious fun and exploration of various problems, slide lectures and demonstrations planned.

15 people, 10 days.

(2) Sandblasting and Carving

Michael Clancy, also from the USA, will be conducting a 5-day workshop using traditional syphon blasting machine. All cold working processes will be fully discussed and demonstrated, allowing the students to combine their ideas with the new information to develop their personal projects on 1/2" plate (possibility of a limited number of hand blown forms, too).

10 people.

(3) Surface Techniques

This one-day workshop is designed to give all participants an insight into the areas of painting and staining, sandblasting, silk screening, glass carving, acid etching and fusing. The workshop will be in slide/talk format with papers available on each topic.

20+ people.

(4) Neon

Neil Roberts will be running this 3-day workshop focusing people's ideas on design and light in an interior space. Emphasis is on collaboration around a theme (possibly 'The Banquet'). Includes a visit to a neon factory so participants can see the techniques forming the finished product.

10 people.

(5) Experimental Fusing Techniques

This 5-day workshop by Warren Langley will be for people interested in advanced techniques for kiln forming glass. Designed to stimulate participants into different approaches based on experimentation to further designs and ideas.

10 people



n.g. brown

and associates

Manufacturers of gas burners and controls for furnaces, annealers, slumpers, flame polishing etc.

Temperature control equipment.

Oxygen atmosphere analysers.

Balances and weights for weighing chemicals.

Hand held and bench mounted torches.

Suppliers to most of the hot glass workers.

New generation recuperating hot glass burners available to reduce gas consumption.

For full details contact:

N.G. Brown & Assoc. Pty. Ltd. 7 Albert Street, Richmond 3121. (03) 428 7766 (03) 428 1588

Ask for Mark Brabham.

GLASS IN PUBLIC SPACES REPORT

During January, 1987, Ausglass will present a national glass exhibition, based on the theme –

'Glass in Public Spaces'.

The exhibition will be staged at the Westpac Gallery in the Victorian Arts Centre complex, and will run from January 23 to February 15, 1987.

Developments in Australian art-glass have grown and diversified considerably in recent years and accordingly, so has the scope of its market acceptance. Traditionally, the Australian crafts have provided quality production work for the domestic market, as well as fine one-off pieces geared towards the collector and public museums and galleries, and our craftspeople continue to meet the growing demand. In addition, despite our isolation from the cultural centres of the world, the Australian crafts movement has gained much ground, recognition and acceptance in international spheres. Another of the growth areas has been in work specially commissioned for the business and corporate sector.

The major aim of this exhibition is to promote the widening parameters of glass-art, highlighting traditional and contemporary techniques and usage of glass in the architectural and interior design arenas. The Ausglass exhibition is unique in that it gives glass artists the opportunity to demonstrate to the business, public and private markets, the diversity and scope for the application of glass in man-made environments.

The objective is to increase the range of the market's acceptance for work in glass, encouraging architects and interior designers to consider contemporary glass and its use in new and innovative ways.

The exhibition is geared towards educating both the professional and public viewer on the versatility of glass, allowing individual artists the opportunity to extend the personal boundaries of their work and ideas.

T & K Stained Glass, an ACI company, have generously sponsored this prestigious event. A prize of \$5,000.00 will be awarded by T & K, as a personal development grant to one of the selected participants in the exhibition, thereby making this award equal to the richest craft prize currently being offered to Australian craftspeople.

Philip Dodd & Christine Tyshing Curators – 'Glass in Public Places' For more information phone (03) 690 6991.

Curator's comment

Sixty Australian glass artists submitted their folios to a selection panel for possible inclusion into the Ausglass T & K 'Glass in Public Spaces' exhibition at the Westpac Gallery in early 1987. Twenty-five of these were successful (their names are listed further on) and offer collectively quite a frightening diversity of the use of glass.

The judging panel comprised of Geoffrey Edwards, curator of glass and sculpture at Victoria's National Gallery, Daryl Jackson, well-known Australian architect, Janne Faulkiner, well-known Australian interior designer, and Michael Young, craft curator of Victoria's collection.

If you were under the illusion that there was a common ideology, a peculiarly Australian thrust, a dominant parochial influence prevailing in contemporary glass—forget it! This exhibition will demonstrate to its targeted audience, architects and interior designers and the general public, a myriad of interpretative styles spanning every technically manipulative and aesthetically paramatised approach possible.

Given this breadth of artistic artisanary we can expect at worst, variety; at best, twenty-five glass artists with the uncanny ability to encapsulate within the four walls of the Westpac Gallery every conceivable approach to glass that is humanly possible, and in between these extremes, we will have an exhibition that sits comfortably and proudly.

For those who were not selected, look not at what is not, but consider the fact that you will now not have to work over Christmas! I trust your exclusion will not dampen the large and enthusiastic response we received for this show. I can only hope that will be carried over and used positively at the Ausglass Conference in January 1987.

The exhibition's strength will lie in its diversity and ability to demonstrate the parameters of potential application Australian glass artists are able to play in Australian architecture and interior design.

Special thanks to ACI's T & K Glass for supporting this exhibition and making available the generous non-acquisitive \$5,000 award.

Philip Dodd.

Those selected are –

Rob Knottenbelt Judy Elliot Helen Aitken-Kuhnen Kirstie Rae Adrian Gemelli Tom Henty Gerhardt Emmerichs Gaylene Allan Jan Aspinall Berin Behn Shirley Gibson Ede Horton Mark Davoren Julio Santos Julie Brand/John Farrington Maureen Cahill Nick Mount David Wright John Greig Kurt Florimond

Giselle Courtney

Warren Langley

Shar Moorman

Mark Douglas

Sergio Redegalli.

TREASURER'S LETTER

As Treasurer, I would like the members' consideration on a matter I will raise in the Annual General Meeting at the Conference.

The proposal is to have the actual changeover of Ausglass Committees at the end of the financial year following the Conference, on 30th June, and continue to do so each two vears.

This will allow the treasurer to complete and finalise the Conference transactions before handing over to the next State. It will enable the existing committee to conclude all their conference commitments and perhaps publish a last newsletter as hindsight to the conference. Another benefit I foresee is to allow the newly-elected President to return to his or her State, form the committee and start to organise projects without the urgency felt in the past. I would like to hear from any members who have views on this scheme. Please write to Reg Loats, 37 Duncans Road, Werribee, 3030.

Also I would like to point out to members that the membership runs from 1st January to 31st December. I do not propose any alterations to this, but I do have difficulties with members who pay in the latter part of the year.

Reg Loats, Treasurer.

AVAILABILITY OF THE BLACKWOOD STREET GALLERY DURING THE AUSGLASS CONFERENCE

The Blackwood Street Gallery is situated within the Meat Market complex in North Melbourne. It is a leased gallery space available to Ausglass members from January 9-30, 1987, hence during the 1987 Ausglass Conference. It is the responsibility of the exhibitor to entrepreneur the exhibition at a cost of \$180 for the three weeks of the show. Installation of the show would occur on January 8 and dismantling on January 31, 1987. Any further enquiries to be directed to Julie Brand, 76 King William Street, Fitzroy, 3065.

TRADE FAIR NOTICE

(For a \$100 outlay, can you afford not to be there?)

Ausglass '87, a gathering of everyone in all areas of glass, will be held in Melbourne during January next year.

Over 500 delegates will attend the Ausglass Conference at the Melbourne College of Advanced Education over the period 26-30 January.

A "Trade Fair" of associated technology is planned for the Foyer/Registration area. Space is limited to twelve exhibition sites of 2m width x 1m depth.

A plan of the exhibition area is shown below. Bookings will be accepted strictly according to the sequence received by mail. When replying, please nominate first, second and third location choice.

All Exhibition sites are available for the duration of the four-day Conference at a cost of \$100.

Closing date is December 12, 1986. Sites are to be confirmed by the 19th December.

Send your bookings and remittance to:

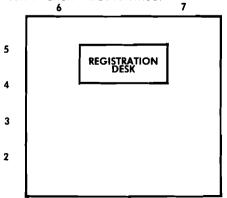
The Treasurer,

1

Reg Loats,

37 Duncans Road, Werribee, 3030. *Cheques to be made payable to AUSGLASS.

Upon receipt of money a receipt and confirmation will be returned.



BILLETING NOTICE

Those members who wish to be either billeted with other glass artists or stay at Ormond College (Melbourne University) need to let us know as soon as possible so that we can book the rooms in advance. Those who choose billeting will be booked into the College should the number of places be filled.

The prices at Ormand College are:

Bed & Breakfast - \$27.00 Lunch - \$ 4.00 Dinner - \$ 7.00 Full Board - \$38.00

You do not need to know your meal arrangements at this stage, just an indication of accommodation. Please reply to Graham Stone at 20 Sydenham Street, Highett, 3190, or phone (03) 598 6898.

Regards, Graham Stone.

MEMBERS' SHOW & AUCTION

As usual, for the duration of the Ausglass Conference there will be an exhibition of members' work. The location will be in the vicinity of the College, and therefore all work will be imminently accessible and discussable. As well as luggage, all members are invited to bring to the Conference one or more pieces to exhibit. It would be desirable if all pieces were for sale, and Ausglass will be taking a 20% commission to help offset this exhibition's costs

Ausglass members are also invited to donate a piece of their work for a "Glass Auction" to be organised by the Victorian committee, and any money raised will be given to the next Ausglass host state. (It's reassuring to have a little cash to start the ball rolling again, believe me!)

Members may either bring another piece over and above their "Members' Show" piece(s), or should it remain unsold, they can allow that piece to be auctioned. A real

8

12

auctioneer (as opposed to an unreal auctioneer) will be conducting this event,
and your support will help Ausglass as an

organisation for the next two years.

We need your support to make this event a success, so cough up, you stingy bastards!

ILLUSTRATED PAPER ON AUSTRALIAN STUDIO GLASS

To facilitate the preparation of an illustrated paper on contemporary Australian studio glass (for delivery at the 1986 Ausglass Conference), artists are kindly requested to submit sets of good quality 35mm colour slides of recent work (completed in, say, the past two years) by November 1986.

Slides will be selected for inclusion in the address on the basis of the relevance of the work to specific themes developed within the paper and on the quality of the slide itself. Colour slides should be of professional quality – subject should be properly framed and lit; image should be carefully masked as required; background should be flat and neutral.

All slides should be identified by adhesive labels with basic information as follows:

Name of artist
Title and date of work
Medium and maximum dimension
Collection or location (if relevant).

It would be greatly appreciated if artists would also provide a separate covering note listing the artist's address and contact telephone number and any further documentation which may be appropriate to the work represented in the slides.

Following the conference, all slides will become part of the respective artists' files maintained as a research facility at the National Gallery of Victoria.

Material should be sent directly to Geoffrey Edwards, Curator of Sculpture and Glass, National Gallery of Victoria, 180 St Kilda Road, Melbourne, 3004.

PRADIANT

105 Newlands Road, Coburg Phone: (03) 350 4044.

adiant Stainless Products manufacture and distribute a wide range of Lead Products including Lead Came. Because we use only quality Lead Ingot in manufacturing, our Lead Came is widely accepted by many studios and other users, such as the hobbyist.

Our brochure highlights the broad range of product which we currently manufacture but we always welcome ideas and suggestions to improve our product range.

Our Window Lead is normally supplied in 1200-1300mm lengths and is packed in sturdy 25 kg cardboard packs. We can supply our Window Lead in other lengths or, on reels if required.

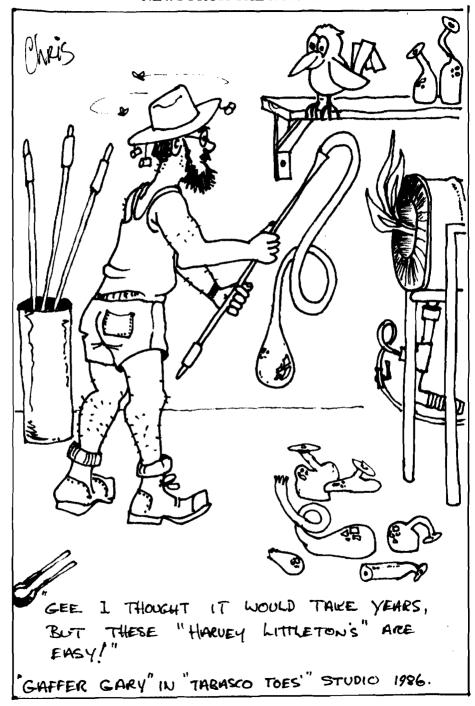
Our product is distributed throughout Australia. Only limited stocks are carried as we have found that most users prefer to allow us a week or two to make their requirements to order so that they can be certain that their Lead is "fresh" and easy to use.

We believe that our product will readily meet your requirements and trust that you will find it easy to use and most satisfactory for its intended application.

Please contact us if you have any queries. – it's the start of the Radiant revolution.

L.F. Spittle Manager – Lead Products

NEWS FROM THE NORTH



WHAT'S THE BIG RUSH?

It's just come nightfall, blackness all around me — I'm staring into the bonfire I've built to burn off broken branches that have been brought down by the numerous fierce storms we have experienced during the wet season. There is an Autumn tinge of coolness on the day's dying wind — it's peaceful and quiet, with the bushy smell of burning ironbark limbs and eucalyptus leaves on the evening air . . .

In January I paid a visit to the Sunshine Coast, passing two weeks at the hillside octagon of Chris ('Tabasco Toes') Pantano and his soul mate Joan-Mary. The first week I helped him debug the new glass furnace he had spent the last year building. This consisted of undoing virtually every gas line connection to all studio equipment and redoing them with larger nipples and/or 'Stag' – the furnace-maker's friend! Then came the gradual firing up program to get the furnace broken in and ready for work.

"Do you think it's too loud? Will the neighbours complain?", as the steady roaring of the blower blotted out the night sounds of crickets and curlews.

On the Saturday Peter ("Gaffer") Goss came up to partake of the inaugural gathers from the furnace, and offer humourous words of encouragement to Chris's new venture.

"It works – and bloody well at that!"

The second week I learnt all about opening and shutting doors (great stuff for pastry cooks and commissionaires), as I assisted the 'resident' glassblower Judy Harris go through her paces. After Judy had finished for the day I would eagerly grab a blowpipe and perform my uncoordinated manoeuvres with the molten glass — creating all kinds of 'Harvey Littletons' (bent forms!) and 'one-offs'.

By the week's end I had managed a half dozen forms through to the lehr, proudly to be carried back to North Queensland and installed on the kitchen bench.

Ah! yes – hot glass is for me!

Back up here in the north I'm finding that the isolation of the bush, the very factor which

originally attracted me to this part of Australia, poses hurdles for hot glass aspiration. LP gas cost 49¢ as opposed to 29¢ per litre (70% higher); whilst no mains power means a naturally inspirated burner – increased gas consumption. I live away from town on a track that looks more like a creek bed than a road. Freight costs are high and work both ways – in and out. The market is small by souther standards . . . and so on.

So I'm squatting by this night fire with thoughts of selling this place in order to raise come cash to set up a hot glass studio somewhere more accessible to 'things'.

With the red/yellow flames flickering in the night, and a feeling of earthy contentment permeating my body, I'm more likely to wonder—"What's the Big Rush?".

Gary Burgess

QUEENSLAND'S SECOND HOT GLASS STUDIO

Mid-January and we were ready to fire up our glass furnace for the first time. Not the right time of year in sunny Queensland but it had taken us about 8 months to get it all together so we were not going to wait for the weather to cool off before we got started.

Peter Goss phoned to say Gary Burgess was down from the far North and would be keen to see our new set up. Next day, Gary turned up and at just the right moment. I was unhappily taking all the gas connections apart and reassembling them, as I has discovered that the local gas fitters knew less about gas connections than I did. Two days later, we fired up, using a 3/4" burner to slowly heat the pot and cast inner sections of the spherical furnace. It would take all the night and most of the next day to get up to temperature, so we decided on a game of tennis to release the tensions built up over the last few days.

We charged the furnace on Thursday and were ready on Saturday morning to take the first gather. "Gaffer" Goss came over for the event and expanded the first bubble. Meanwhile, Judy Harris was limbering up in

the corner and itching to get her hands on to a blowpipe. We had to contain the aspiring "Gaffer" Gary, who, as we later found out, was planning a collection of exotic glass "objets d'art", reminiscent of the sculptural forms of Harvey Littleton, although somewhat more spontaneous, for want of a better word. I displayed a less anxious approach, enjoying the knowledge that all the equipment was bearing up to expectation. It all seemed less mysterious now that it was in operation. The dream had materialised and now we had to get in and make it all work.

For those interested in the technical side. I will outline some of the aspects of the design of the equipment. The furnace consists of a cast, semi-spherical lower section, which holds a 50kg pot. The upper section consists of 4 segments of a semi-sphere which, when placed on top of the lower section, forms a sphere. It is side fired through a burner port in one of the sections. A separate cast tunnel gives access to the pot for gathering and charging. The door is a cast slab, which is operated by a foot pedal to lift and which closes automatically as you release your foot. The pedal travel is about 150mm and the door is counter-balanced by an adjustable weight on the outer end of the lifting arm.

The cast sphere is then wrapped in kaowool and clad with sheet metal, held together by bands of builder's strapping and bolts. The "glory hole" is a simple 44 gal. drum on its side lined with kaowool and sporting

several doors with various apertures to facilitate reheating of different sized objects.

The lehr is a simple bottom-fired, down draught kiln with heat storage provided by insulation bricks in the floor and bag wall. The walls and roof are fibre and all this is set up in a welded angle-iron frame, lined with sheets of compressed "fibro" on the outside.

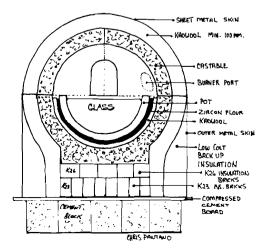
The cost of gas to run the furnace is approx. \$18 a day, the glory hole \$3.50 and lehr \$3.00 a day. Air is supplied to the furnace and glory hole from a second-hand blower mounted outside the back wall of the workshop to help keep noise level down in the work area. An homemade acoustic attenuator (silencer) is fitted to the air intake to reduce external noise.

At the time of writing, we've been in production for two months and have found that we can turn down the furnace a few K.P.A.'s and still have a glass of desirable workability. This, coupled with a few modifications I'll make to the burner port, should reduce the running costs by a few more dollars a day. The addition of a heat exchanger may also reduce running costs.

That's all from our corner of the Sunshine State and don't forget, if you are in Queensland for your "annual holiday!", drop in and see us.

Chris and Joan-Mary Pantano, M.S. 1096, Dulong Road, Nambour, 4560. Telephone: (071) 41 5178

POT FURNACE - 50 KG CAPACITY



OUT WITH THE OLD, IN WITH THE NEW – OR

"My Love Affair With the 11/4 inch Galv Water Pipe

by Peter Goss

This January and February has seen major changes here at Paraison Studio Glass. We knocked out two walls just for starters to give more room, built a new front-fired furnace of Monofrax (62kg capacity), and we also made provision for an oxygen probe for fine tuning the burner. The new furnace design meant all new door operating gear.

Which brings me to the $1\frac{1}{4}$ inch saga. I became totally besotted by the stuff. The only parallel I might draw for you, dear reader, is the fact that I was like a child with a new Leggo or Meccano set. After completing the furnace door gear, my attention turned to a new furnace burner and new glory hole burner, a gathering voke, a puntee support bracket (puntees are heated in the furnace flue), a burner support bracket, and air conditioner brackets. After depleting a large plumbing firm of all its stock, a normally po-faced counter person could not hold his curiosity any longer. He broke down and cried "What are you doing with the stuff?". On my reply his look of curiosity turned to one of disappointment – "It's for a hot alass studio...." I said. Question answered but unanswered.

The other new addition to my studio is a new double lehr (side by side). The internal sizes of each lehr are height 600mm, depth 800mm, and width 600mm. This double lehr has been built for me by ASFC Kilns, according to my design. We are utilising heat from the full cooling-down chamber to pre-heat the empty chamber for day 2.

Another ingenious attempt at saving gas costs was my patent pending castable heat exchanger, which had taken me some seven days to complete. The last bit of refined touching-up with the Makita saw it standing there in the garden in all its glory. A short trip to the studio in the sack truck

would see it in place. I have to report, dear reader, this was not to be – the short trip saw another grown man (5 foot 81/2 inches) break down and cry. We (the sack truck that is) hit a tuft of unmown arass and in a flickering of an eyelid we saw seven days' work break in two. In rage and despair I picked up the two pieces and smashed them to smithereens. I should hasten to add I have the drawing for the Mk 2 model to be built next year. The last addition was the up-grading of my small 2 inch wa blower to an 8 inch wa. With the larger blower came more noise. This was overcome by building a new blower box that was two boxes in one with a layer of Omar 1/2 inch underlay sandwiched between the two boxes. An air intake box (3 times the size of the blower air intake, i.e. 90mm blower air intake to box lenath 270mm) was fitted. Also included in the air intake box were half baffles all lined with Omar underlay. A small made-tomeasure provided the air intake filter. Another filter within the box itself was begrudgingly provided by my wife June – it was her cone-shaped flour sieve.

I have also found the Selleys product "Redskin" makes for very good blow pipe handles. The method is to plug the mouthpiece hole and cut a small piece of rubber hose to fit over the blow pipe about 25mm in depth. Slide the hose down to where you want the handle to finish – this will enable you to hang the pipe up if you work on your own. Cut a length of plastic water pipe (45mm) approximately 500mm in length. Block one end off and pour the contents of the Redskin can into the tube. Let this stand for 1 hour (to let the bubbles settle out) and cover with cling wrap when not in use. Follow the instructions for applying the product. You may wish to apply several coats. Making sure you cover the 25mm piece of rubber, we slide down the pipe. After 12 hours use a blade to cut a line about 25mm from the mouthpiece and peel off that part.

I shall finish with an offer of a cup of tea to any of you who stray this far north – and, if you stray even farther north, Gary Burgess will have an ice-cold XXXX on hand.

GLASS AWARD AND NEW ZEALAND SOCIETY OF ARTIST IN GLASS CONFERENCE

The third Philips Studio Glass Award provided an introduction to New Zealand glass and its creators prior to the start of the conference.

Presented in the imposing building of the Auckland Museum, with many hundreds in attendance, I was struck by the good standard of the exhibits and the high credibility given to this show by the people of Auckland, obviously the product of an enormous effort by the organisers and participants.

Leadlight and blown glass were in predominance, with a few examples of other areas of study being represented.

A \$2,000 award was offered, the work being judged by visiting artist Billy Morris. Ann Robinson carried off the award for a heavy pate-de-verre bowl, while Gary Nash's large blown vessel and Francis Stewart's leadlight panel received honourable mentions.

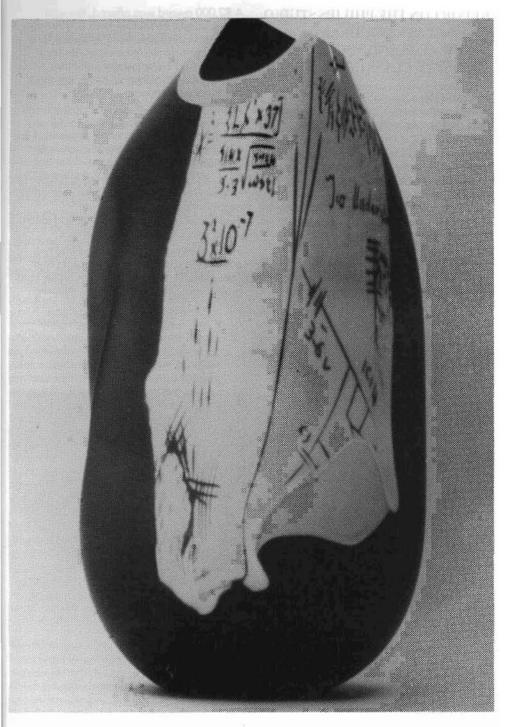
While perhaps the focus was on the more obvious forms of glass, the panache and imagination evident in much of the work left a lasting respect for our fellows over the Tasman.

It should be noted that this event is open to overseas contributors, and I am assured the organisers would welcome our participation. A cross-fertilisation of ideas could only be mutually beneficial.

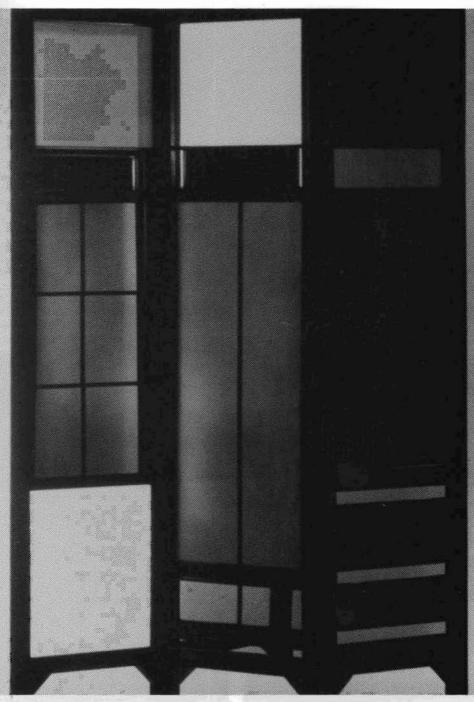
The conference was separated into two different areas of interest, hot glass and cold glass. I cannot report much on the cold glass event, except that amidst lectures,



Anne Robinson: "Pate de Verre Bowl" Winning Entry 1986 Philips Studio Glass Award



Gary Nash: "To Understand" Blown Glass, etched 430mm x 220mm



Holly Sanford: "Three Panel Screen" Highly Commended – 1986 Philips Studio Glass Award 1700mm x 1500mm



discussions, etc, over 3,000 slides were shown in the five days. As I get slide-shock after the first few salvoes, I stayed in the hot glass studio!

The hot glass workshop was hosted by Sunbeam Glass in Auckland, a successful co-operative venture owned by John Croucher, Ann Robinson and Gary Nash. Eventes kicked off with twa days of demonstrations by Billy Morris, a Pilchuck artist and gaffer of Dale Chihuly's glass blawing team. Also in attendance was John Ormbrek who imparted much information on furnace and mould technology, as well as providing Billy with very able assistance.

Billy Morris's speciality is large-scale blawn pieces. I think all of us were impressed by Billy's ability to handle huge volumes of glass. The end result, after blowing into a wet cherrywood mould, and diamond-sawing the daggy end, was 'Standing Stones' inspired by the ancient architecture of Britain's outer islands. The quality of these pieces, almost regardless of their scale (about 120cms) more than justified the effort involved in their production.

Although rather taken aback by the sight of twenty kilos of glass being thrown about on the end of an iron, close observation of the process made it clear that success on this scale is achieved more through careful planning of process and organisation of facilities and assistance, than through sheer brute strength; although a little muscle does not go amiss!

After two days of demonstrations, there was the opportunity for us to try out some moulds for ourselves. All manner of things were used for making moulds, sands of various types, timber, bricks, steel, etc. The results of these efforts were no less varied than the materials employed.

Perhaps my only quibble was that the time-tabling of the hands on session could have been better organised. It was really a case of first in best dressed, which left some of the less forward with a poor showing.

Nonetheless, I found the atmosphere to be positive, energetic, and conducive to spontaneous work. Everyone left knowing considerably more than before, and charged with enough enthusiasm to keep up the momentum for some time.



Billy Morris moulding glass at the New Zealand Glass Conference.

I have heard people question the value of intensely practical workshaps of this nature, preferring the more cerebral atmosphere of the lecture theatre. I can only respond that glass-making is an active occupation, and the more well versed one is in the sublteties of that occupation, the wider vocabulary we have to express the poetry of the medium.

As for information exchange, the workshop format provides ample opportunity for informal conversation. I learnt something of wood-gas fired furnaces (there are at least 2 in New Zealand), colour formulation, moulds, workshop preparation, design approach, presentation, morketing, etc. In short, when I left, my notebook was full.

Despite the informal atmosphere, the amount of research and prior preparation was obviously enormous. Good workshop facilities, comfortable accommodation, regular venue for evening meals and good company made for a tremendously enjoyable experience. Well done, NZSAG. (How do you pronounce that??)

Richard Morrell.

CHANGE TO CONSTITUTION NOTICE

Should Ausglass members wish to change any aspect of the Constitution they will have to write to us now so we may publish it in the magazine prior to the Annual General Meeting which, as usual, will occur at the Conference.

SALES TAX AND THE GLASS ARTIST

After a recent tangle with the Sales Tax Department, some disturbing information has come to light.

While there is a specific exemption listed for art ceramics, there is no such exemption for art glass. Of specific relevance is the last paragraph of Item 68-2 of the Sales Tax Classifications and Exemptions book. This paragraph lists items which are specifically not exempt, as art works, and the list includes the word 'glass'. It appears that the only things which are exempt for glass artists are permanently installed windows and items sold to public collections.

For those who are new to the complexities of Sales Tax it works something like this; if you are fortunate to make and sell \$1200 or

more of taxable goods in one year, then you are liable to Sales Tax on these items.

The tax is payable by the retailer and collected by the wholesaler, who then has to make a monthly return to the tax department and pay the tax collected. In effect, the tax is added to the bill when the work is sold. Which makes the wholesaler (us) an unpaid tax collector.

The rates of tax are:

Functional goods of a utilitarian nature, e.g. bowls, vases, goblets, etc.

10 per cent
 Luxury goods, e.g. cut glass
 30 per cent
 Miscellaneous goods, e.g. paperweights,
 freehanging panels
 20 per cent

I, and possibly others, have always believed that all art works are exempt, and behaved accordingly. Although much depends on local interpretation of the Act, while the clause which states that glass is specifically not exempt remains in the book, we are skating on thin ice.

I have made application for a similar clause to be drawn up for us as for the ceramic artists. The Department has been most helpful thus far, and there are certainly good grounds for a successful application. More info as it arrives.

R. Morrell.

THE AUSTRALIAN CRAFT SHOW

SYDNEY TO HAVE AUSTRALIA'S FIRST CRAFT EXTRAVAGANZA

Australia's first major Craft Show will be held at the Sydney Showground from November 26th to November 30th, 1986. The Show will feature over 100 exhibitors carefully chosen from amongst Australia's finest craftspeople who will display and sell their original and unique creations.

All the major craft disciplines will be represented including pottery, leatherwork, woodturning, applique, iron work, weaving, silkscreening, angora spinning and weaving, rug making and jewellery ... making it a true craft show extravaganza!

The Show will feature daily fashion parades of wearable crafts, demonstrations and video presentations.

Organised by June Bibby and Harvey Shields who are also responsible for a Fashion Expo to be held at Centrepoint later this year, The Australian Craft Show will provide Australian craftpeople with the opportunity of exhibiting their works and generating a greater public awareness of our outstanding craft heritage.

"Having founded the very successful annual craft show in Canada, which has been running for eleven years and attracts many thousands of people each year, I could see the great potential for a similar show in Australia – especially as there is

such a wealth of talent here" said organiser June Bibby.

The Show will feature crafts from across Australia and is expected to become an exciting annual event.

Glass workers will include:

Richard Morrell (Vic)
Peter Crisp (NSW)
Peter Campbell (NSW)
Giselle Courtney (NSW)
Cliff Dickenson (Vic)
Jeff Hamilton (NSW)
Helmut Hiebl (NSW)
Warren Laigley (NSW)
Stephen Morris (NSW)
Sallie Portnoy (NSW)
Moshe Pleshette (NSW)
Keith Rowe (NSW)
Bob Wynne (NSW)

MAKER'S GALLERY

Situated within the busy Sandy Beach Centre in Sandringham, Melbourne, and overlooking one of the most beautiful stretches of Port Phillip Bay, Maker's Gallery is now just over two years old.

An intimate (but expandable) gallery space, with good lighting, Maker's Gallery aims to offer low-cost exhibiting space with the backup of the Centre's administrative facilities, enabling artists and craftspeople to organise, promote and run exhibitions of their own work, and to offer space for exhibitions of special interest to the local community.

Duration of exhibitions at Maker's are between one and four weeks, depending upon the exhibitor's requirements. Past exhibitions have drawn on the expertise of people from the local and not-so-local artistic community and the media represented in these exhibition have been varied.

Thematic exhibitions are often held in conjunction with other projects at the Centre and events in the wider community, such as the 'Photography Of Peru' exhibition last year by Michael Pitcher, who also organised a concert of South American music and folk dancing on the opening weekend.

Exhibitions at Maker's are always open on Sundays in conjunction with the Sandy Beach Concerts and often on Saturdays and week days.

Sandy Beach Centre is a non-profit organisation promoting the arts.

Enquiries, contact: Mary Walsh, Sandy Beach Centre, cnr Beach Road and Sims Street, Sandringham, 3191. Telephone: 598 2155.

ARTS PROSPER AT CALOUNDRA

REFLECTIONS – by Kate Collins

From small beginnings ... 13 years ago up Caloundra way, a group of five local art-lovers banded together to raise a little money for the local Meals on Wheels. They invited a couple of local artists to contribute some small paintings, which were sold at a modest fee to raise funds.

Last week, as Mrs Betty Drysdale looked at the array of art works overfowing the huge auditorium and foyer of the Caloundra Civic Centre at the opening of the 1985 Caloundra Art and Crafts Festival, she might have thought fleetingly of Topsie, because, like Harriet Beecher Stowe's famous character, the Caloundra Arts and Crafts Festival has just gro'd and gro'd.

In fact, after that initial success for the Meals on Wheels, Mrs Drysdale and her small band never looked back. The following year they formed the Caloundra Art and Crafts Festival Committee, and took on the serious job of turning Caloundra into one of Australia's premier arts forums. Their success was beyond their wildest dreams.

Thirteen years later, Mrs Drysdale, the only remaining founder member on the Caloundra committee, has a lot more helpers. Most are active painters, sculptors or potters, but still find time to do a mountain of voluntary work – from catering to carting rooms full of paintings about. And, of course, hustling that essential hip-pocket support from the Sunshine Coast business and professional community which, with some very civic-minded individuals and the generosity of the Landsborough Shire Council, sponsored the Festival to the tune of \$9,200 this year.

Labour of love

The Festival is a do-it-yourself labour of love, organisation, paperwork, not to mention hanging of paintings, quilts, pottery, etc. of heroic proportions. But there's nothing do-it-yourself about the art exhibited at the 1985 Caloundra Festival.

The growth in interstate entries this year – superb art work came to Caloundra from as far afield as Richmond, north-west Queensland, to Thebarton, South Australia – proves that artists around Australia rate the Caloundra festival as a showcase of national significance.

And it was clear this year from the number of established names on paintings, silverwork, ceramics, that the financial incentive is only half of Caloundra's attraction – equally magnetic is the professional prestige that a Caloundra win can add to an entry in the artistic Who's Who listings.

Art festivals such as Caloundra's play a major role in developing talent by throwing amateurs into the arena with the established professionals. As Betty Drysdale says, everyone has to lift their game, and many of the unknowns in the Caloundra exhibition upstaged the established big names and took awards for work of exceptional quality. In fact the country artists proved yet again that being at a severe disadvantage distance-wise can have real advantages – the landscapes exhibited by far-western painters like Beverley Johnson of Biloela and Jo Forster of Richmond spoke with an authenticity and immediacy to the land that no weekend-touring city artist could match.

The scope of the Caloundra Art and Crafts Festival is another of its strengths. Few other regional art centres provide awards for the literary as well as the visual arts. The fact that 98 percent of entries in Caloundra's short story and poetry sections came from interstate may be proof, as festival president Michael Wilkinson joked, that lack of daylight saving cut down writing time for Queensland writers.

Poetry was given just as high a profile as any other artform...exhibited right up on the walls alongside paintings. Earphones and tapes of short stories were also provided – an inspired bit of artistic pioneering which most public galleries will probably take ages to catch up with. And while there were no performing arts included this year, they will be a major priority in coming festivals. And what better setting than the magnificent Civic Centre auditorium stage? The Caloundra Festival people proved this year that while big city culture ossifies at its glittering heart, the liveliest art centres are increasingly the regional ones.

If anyone provides a showcase for the regional artist, it's the Queensland Potter's Association, which is exhibiting the work of top potters from three states – Lyndal Moor from Queensland, Michael Keighery from New South Wales, and Rolf Bartz from South Australia. Moor, tutor at Kelvin Grove and AFAS, explores a Persian theme. Keighery works sculpturally in mixed media, and Bartz works in a painterly way with fine porcelain.

MEAT MARKET GLASS WORKSHOP

In the latter part of 1986 the Meat Market Craft Centre is offering five workshops. These are:

Introductory Glass Fusing and Slumping

by James Thompson August 25 – August 29 10.00 a.m. to 4.00 p.m. 10 vacancies at \$95.00 each.

Glass Painting and Staining

by Gerry Cummins September 22 – September 26 10.00 a.m. to 4.00 p.m. 15 vacancies at \$95.00 each.

Advanced Fusing and Slumping

by Allan Crynes October 13 – October 17 10.00 a.m. to 4.00 p.m. 10 vacancies at \$95.00 each.

An Introduction to Acid Etching

by Graham Stone One day – October 30 10.00 a.m. to 4.00 p.m. 10 vacancies at \$95.00 each.

■ DEGUSSA PRODUCTS FOR GLASS

DEGUSSA AUSTRALIA PTY LTD 17 Raglan Street, P.O. Box 214, South Melbourne, Victoria, 3205 Telephone: (03) 699 2188

Degussa Australia Pty Ltd are pleased to submit a brief documentation on our product range along with photographs.

We initially require feedback from alassworkers as to which of our products hold the most appeal and estimated yearly usage. This will enable us to hold stocks.

Replies to the above address will greatly assist us in this purpose.per Linton Spenser.

THERMOCOUPLES & RESISTANCE THERMOMETERS (Pyrometers)

OPAQUE GLASS COLOURS FOR BRUSHING, SCREEN PRINTING & SPRAYING

Firing Range 490°-580°C

OPAQUE GLASS COLOURS Firing Range 540°-580°C (More Resistant)

STRUCTURAL GLASS OPAQUE **DECORATING COLOURS** Firing Range 580°-600°C

RESISTANT GLASS OPAQUE DECORATING COLOURS FOR SCREEN PRINTING & SPRAYING

Firing Range 575°-620°C

TRANSPARENT GLASS COLOURS Firing Range 520°-580°C

DECORATING COLOURS WITH METALLIC EFFECT FOR FLAT GLASS Firing Range 580°600°C

SATIN MATT GLASS DECORATING COLOURS (Acid Etched Effect) Firing Range 540°-610°C

DIFFUSION COLOURS (Silver-based for reaction on Glass)

Firing Range 500°-540°C

SIMILI INCRUSTATION (For applying a precious metal to matted base) Firing Range 520°-580°C

ORGANIC INKS FOR DIPPING, SPRAYING & HAND PAINTING (low resistance) Oven Curing 150°-180°C

UV CURING SCREEN PRINTING PASTES Firing Range 540°-580°C

METAL GLOSS COLOURS FOR GLASS (Imitation gold, copper, etc.) Firing Range 580°-600°C

LIQUID BRIGHT GOLD & PLATINUM FOR BRUSHING, SCREEN PRINTING & SPRAYING

Firing Range 500°-580°C

BURNISHING GOLD & PALLADIUM FOR GLASS

Firing Range 500°-580°C

LUSTRE COLOURS FOR BRUSHING & SPRAYING

Firing Range 540°-580°C

SCREEN PRINTING LUSTRES FOR GLASS Firing Range 520°C and higher

THERMOLUSTRES (Applied to molten glass

for instant firing)

Glass Temperature 600°-650°C

CRINKLE ENAMEL (Coloured and transparent granules applied by adhesive) Firing Range 520°-560°C

SCREEN PRINTING OILS FOR DIRECT & INDIRECT PRINTING

WATER BASED & OIL BASED MEDIUMS FOR BRUSHING

SPRAYING MEDIUMS

THINNING OILS

LIQUIFIER (To reduce viscosity without thinning)

TRIPLE ROLL MILLS (For mixing pastes)

Photograph: Philip Shireffs

MEAT MARKET GLASS WORKSHOP

Fine Sandblasting and Applied Colour

by Tony Hanning

November 3 – November 7 10.00 a.m. to 4.00 p.m. 8 vacancies at \$75.00 each.

For further enquiries, please contact – Meat Market Craft Centre, 42 Courtney Street, North Melbourne, 3051 Telephone: (03) 329 9966.

SEALE STAINED GLASS

We have received delivery of a significant shipment of beautiful glass from Hartley Wood of the United Kingdom. Included are plain, streaky and opalescent cathedral glasses and, in the mouth-blown antique area, we have pot-metal colours, tinted whites, tinted colours, pale tints, and seedy clear.

Additionally, we have a collection of beautiful cast glass slabs, 300 x 200 x 25mm thick. All are worth seeing.

ART GLASS ANTIQUE GLASS NEW GLASS

HARTLEY WOOD

EUROPEAN

Cathedrals : Antiques : Slabs

0.00

MERRY GO ROUND Cathedrals: Opals

Streakies: Wispies

(including gum green and

many new colours)

SPECTRUM Cathedrals: Water Glass Reamy: Special Opals

Sahara: Machined

Antique: Antique: Flashed

AMERICAN Wissmach : Bullseye : Kokomo : Blenko

PLUS an excellent range of books, patterns, tools and supplies including engraving tips and acid etching cream – available from –

SEALE STAINED GLASS PTY LTD 302 Barkers Road, Hawthorn, 3122

Telephone: 818 5911

IMPORTANT COMPETITION 'GLASMUSEUM'

An international competition for young glass artists has been announced in celebration of the official opening of the Glass Museum in Ebeltoft, Denmark.

This competition is the first of its kind ever, being organized and run by glass people. All members of the jury are glass artists, and all the prizes are sponsored by artists or people from the world of glass.

The opening of the glass museum, which took place on June 28 1986 proved to be a great attraction for a very large number of people from all over the world. More than 150 artists with their families, plus an equal number of people from the world of museums and galleries, attended the opening ceremony. Among the distinguished guests were Her Majesty Queen Margrethe, the Danish Minister of Culture, Lord Mayors, Ambassadors from countries represented in the collection, and many other celebrities.

The collection, which now comprises approximately 600 glass objects by more than 350 artists from all over the world, has since the opening been visited by more than 18,000 quests.

Material concerning the results of the abovementioned competition will be forwarded to you in due time.

The competition is organised by "The Collection of Modern International Glass Art", Glass Museum, Ebeltoft, Denmark.

All professional glass artists born after July 1, 1952 are eligible to enter.

Glass objects executed in any technique – 2- or 3-dimensional as well as mixed-media objects where glass constitutes a major part – are valid as entries. Due to limitation of space the work should measure no more than one (1) metre on any length.

Each competitor may submit 1 (one) work only.

Before JANUARY 1, 1987 participants are requested to submit 2 (two) slides (24mm x 35mm) depicting the actual piece from two different angles. Slides must be accompanied by the attached form, and all

material should be clearly marked with the same code number as on the registration form. As the preliminary jurying will be based upon these slides, it is very important that they are of a good professional quality.

After the jurying of the slides 100 competitors will be chosen and requested to send the piece to the glass museum in Ebeltoft, where it must arrive before APRIL 1, 1987. Entries received after this date will not be accepted for the competition.

Insurance and transportation of the glass to and from Ebeltoft is covered by the artist.

During May 1987 an international jury consisting of:

Asa Brandt Sweden
Bertvan Loo Holland
Maria Lugossy
Finn Lynggaard Joel Myers
U.S.A.

will assemble in Ebeltoft and choose the four prize winners.

Four prizes will be awarded:

DKr.20.000 "The Harvey K. Littleton Prize" Sponsored by Bess and Harvey Littleton.

Dkr.20.000 "The Kugler Color Prize" Sponsored by the families Kugler and Friedrich.

Dkr.20.000 "The Kyobei Fujita Prize" Sponsored by Kyobei Fujita.

DKr.20.000 "The Sybren Valkema Honorary Prize" Sponsored by "Nordisk Glas" Danish Committee.

All selected participants will be notified about the decisions of the jury.

The prize-nominated pieces become the property of the glass museum, and will be included in the permanent collection.

The works of all 100 selected competitors will be shown in the glass museum during the summer of 1987. At the end of this exhibition the glass will be returned to the owners, unless other arrangements are made. All competitiors are invited to deposit their glass in the museum.

Finn Lynggaard, Chairman of the Foundation, Glass Museum, 8400 Ebeltoft, Denmark.

THE MYSTERY OF GLASS FUSING REVEALED

The following article was supplied to Ausglass by Seale Stained Glass, stockists of Merry Go Round and other glasses. M.G.R. have been involved in considerable research into the fusing compatibility of their range of glasses, the results of which follow.

by Steven K. Wilson, Larry Barrickman, Dale Wilson, Henry Wilson.

Glass fusing is ancient history! A melting together of pieces of glass was probably first accomplished by the Egyptians, and predates coloured glass panel fabrication with lead or foil by many hundreds of years. Museums have fused pieces dated before Christ. Nevertheless, fusing was a "lost art" until only very recently. Despite the best efforts of respected industry authorities, this process remained very mysterious and difficult. This article is an attempt to make fusing easy and within the grasp of the basic hobbyist by elucidating a scientific principle heretofore never published.

The recent history of fusing in the United States

West Coast artists eager to break away from the confines of traditional leaded pieces began to experiment with melting different glasses together to achieve a design without lead lines. At first, artists used fusing to create special effects in their panels, much the way turn-of-the-century Victorian glass artisans double and triple alazed in their panels. Soon, totally fused pieces were constructed. It was then the artists complained that the process was fraught with too much trial and error to find "compatible" glasses. In the early days, exhaustive test firing was necessary before committing glass combinations to the project.

About six years ago Boyce Lundstrom and Daniel Schwoerer of the Bullseye Glass Company perceived the difficulty, largely as a result of their own artistic needs. Their company began to produce the first glasses which were certified by the manufacturer as fusible with each other. The Bullseye Glass

Company formed a subsidiary, The Fusing Ranch, and began to market a line of fusing supplies, kilns, books and patterns to go along with their fusible glass. They promoted fusing at trade shows, sponsored seminars and advertised widely. It was hardly an overnight success! As recently as 1984, Bullseye's line of fusible glass accounted for less than 15% of their total glass sales according to Mr Schworerer.

enthusiasm spread. Fusing as a craft got a

Nevertheless, they persevered and

big shot in the arm in 1985 when Ed Hoy Stained Glass Distributors got involved. Hoy's Naperville, Illinois, operation is one of the biggest distributors of stained glass, and tools of the trade in the world and took over the exclusive distribution rights for The Fusing Ranch. This successful wholesaler then began to develop seminars for teachers, additional products and chemicals, and extensive promotional activities. At the recent Stained Glass International trade show it was obvious that the industry as a whole was noticing the rebirth of fusing as a craft.

Still, something was missing. There was a spark, but no conflagration of interest as there had been with panel fabrication in the 1970s. It is our belief that until now, fusing was simply too difficult to learn. In addition, there was too little reward available early in the learning curve. Up to now fusing has not been something that can be accomplished after one lesson or reading one article. Success came only after practice, testing glasses, perseverance, patience and not a small amount of luck. Let's face it, it's almost un-American to suggest that people test something before using it.

This article is designed to take the mystery out of fusing and make it well within the grasp of any craftsman who can cut glass. Fusing can be very easy if done with compatible glass and will produce some very unique finished products. It is actually much faster than leaded or foiled work and has the advantage that the product does not need light transmission to look good. Fusing opens up whole new vistas for the craftspereson who likes to cut glass but is impatient with fabrication. It also serves the hobbyist who may have exhausted his possibilities of window openings and lamps.

The information that follows is a basic introductory manual. It is the result of months of glass literature research, computer programming, test firings, failures, frustration, fun, limited success and eventually detection of a fusing principle which had not previously been publicized. We're not sure that we've solved all the mysteries of what happens to glasses when you reheat them, but using this article and the predictive indexes of Merry Go Round Glasses make fusing a whole lot easier than it has been in the past.

Scientific principles

Before you begin you should grasp several simple principles of glass technology. We'll start with some definitions, as used in glass fusing.

- 1. Glass: A rigid liquid without crystals.
- Fusing: The process by which two or more glasses are combined or blended by melting together.
- Coefficient of Expansion: A linear measurement of how much a glass will move (i.e. contract or expand) as it is taken through different temperatures. The higher the expansion number, the more movement occurs. When glass is heated its molecules are excited. Low expansion glass molecules move very little. Thus a low expansion glass like pyrex can be taken from the refrigerator to the hot stove without shattering.
- Compatibility: A term coined to describe glasses which fuse without stress or shattering.
- Viscosity: The property of a fluid, in this case glass, to resist the forces tending to make it flow.
- Melting temperature: A viscosity measurement (temperature) where the glass becomes a molten fluid.
- Gob temperature: The viscosity measurement (temperature) when the glass can be squeezed through a nozzle.
- 8. Softening Point: The temperature at which the rigid liquid glass slumps.
- Annealing Point: The temperature at which almost all stress is removed from the glass during cooling. This event depends upon the thickness of the

piece plus a time/temperature relationship. For all practical purposes, this is accomplished by heating to fusing temperature, turning off the kiln and allowing the project to cool with the lid closed. The process of annealing means that the glass must be cooled equally from the innermost point to the outside surface or it will crack or shatter.

10. Strain Point: The temperature at which glass becomes rigid.

 Devitrification: The development of a rough discoloured opalescent surface of glass which has been reheated. Most likely to occur with greens, greys and opals, this process can be predicted by using the devitrification index.

Coefficient of expansion has received a great deal of interest in the fusing literature. This linear measurement of how much glass moves can best be illustrated by the "string test". Two very small strips of dissimilar glass are heated in the centre by a torch or bunsen burner. When the glasses are soft, each end is pulled drawing them into a string of glass. The strings are laid on a heat-protected surface and allow them to cool. If they stay close together upon cooling, the expansion rates are similar. Actually, most soda lime glasses (most "stained glass" is composed of soda lime) are similar in expansion rates. For example Merry Go Round Glass varies from 87 to 97.

Traditional teaching has held that the coefficient of expansion was a good rule of thumb to predict fusing. If the expansion numbers were within a couple of units, the fusing process would generally work. BUT we've all found glasses with similar expansion numbers which fused incompletely or not at all. Experience has also shown that often glasses with as much as twelve expansion points difference would fuse. Our research concluded that much more was at work in fusing compatibility than merely expansion coefficients.

Viscosity as a predictive index of fusing

Glass is not a solid but rather a liquid. At temperatures above 2000 degrees F, molten glass is fluid. As the glass cools down, the viscosity (resistance to flow) increases to a point where the glass becomes rigid. Based upon studies done 40 years ago by Professor Lactose, it is possible to quantify the various changes in viscosity at different temperatures. The container industry relies heavily upon these measurements to predict success in forming objects such as jars or bottles. A normal viscosity range for most "stained" glasses is:

Molten state: >2000 degrees (F)
Gob Temperature: 1700–2000
Softening point: 1150–1250
Annealing point: 950–1050
Strain point: 850–950
Rigid: 850

Metal oxides are added to glass batches to make the various colours of "stained alass". Our alass technologist, Larry Barrickman, discovered these chemicals affect the expansion rates and greatly change viscosity characteristics. Henry Wilson devised a computer program to calculate the chemical composition of the glass based upon the glass technology data from Larry Barrickman. The computer program calculated coefficients of expansion, viscosity data and predicted vitrification occurrence for each glass manufactured by Merry Go Round. Extensive testing in the laboratory by Dale Wilson then confirmed the predictive indexes and allowed us to organize glasses into four groups.

We found the viscosity data to be much more important than expansion coefficients to predict compatibility. In layman's terms, as the temperature decreases the viscosity increases to a point where the glass will no longer flow. To apply this principle to fusing: if one glass sets up faster than its fusing counterpart, the glasses will not blend (i.e. fuse) properly even though the coefficient of expansion was within range. On the other hand, if the coefficient of expansion is out of range but the viscosity is complementary, many times the glasses will fuse properly.

Unfortunately, we also found a group of glasses with high sulphide composition which would not fuse with anything. These glasses are predominantly the "hot" colours, i.e. red, orange, and yellow. We're hard at work now to batch these colours

with some new chemical mixes which will yield a "hot" compatible glass for fusing.

Devitrification

This unsightly development is due to the precipitation of compounds during the fusing process. Glass loses its transparency and the surface becomes rough and discoloured. The upper surfaces of the project can be protected by spraying the exposed surface with an overalaze such as Spray A or Flux 92. Devitrification can also be prevented by using clear glass as a coverslip. Only a minority of glasses devitrify, however, and our data allows you to predict which of our glasses will undergo this process. If the devitrification index is positive, there is no need to utilize these costly overglazes since devitrification will not occur.

Thus we have developed three numerical values which under rigorous testing have allowed us to predict whether glasses are compatible and whether devitrification will occur. We've further simplified the data to four groups of glasses with a positive or negative devitrification value. For the first time the fuser will be able to plan a project without time-consuming, frustrating testing.

How to use the predictive tables

Merry Go Round glasses are listed with a letter grouping (f0, f1, f2, f3). Each glass also has a (+) or (-). The letter group predicts compatibility. The sign predicts devitrification. To predict compatibility of two glasses use the following method:

- (a) All f1 glasses fuse with each other.
- (b) All f2 glasses fuse with each other.
- (c) All f3 glasses fuse with each other and with f1 glasses.
- (d) f0 glasses fuse with no other glasses.
- (e) If the devitrification value is (-), protect the surface of that colour or devitrification will occur.

Many glasses can be fused. This article is not meant to indicate that only Bullseye and Merry Go Round are suitable. On the contrary, certain glasses manufactured by Kokomo, Wissmach, Velga, Armstrong, Chicago, Spectrum, Desag (drawn "antique") have been reported to fuse with other glasses made by the same manufacturer. Some of these manufacturers

are at work on predictive indexes for their glasses and hopefully soon testing for compatibility will be a thing of the past. For now, however, the consumer is cautioned not to abandon testing for glasses other than Bullseye certified fusible or Merry Go Round.

Helpful hints for fusing

Having mastered the scientific theory of fusing, it is time to return to more practical affairs. As with any other glass art form, care must be taken to properly cut each piece of glass to make sure the pieces fit. Loose fitting pieces with gaps will not "cleanly" fuse. The result will be gaps between the pieces with the base glass showing through the upper layers. Loose fitting pieces also may cause air bubbles to be trapped between the layers of glass causing an unsightly defect. On the other hand, if you break a piece during a difficult cut you can still use it as the process of fusing will hide the crack.

Dirty glass will result in a dirty fused product. Grease from your hands, oil from your cutter, marking pen lines, and surface dirt or dust should all be removed prior to placing the product in the kiln. Normally, cleaning with a commercial ammonia based window cleaner is enough. If you are having trouble with dirty products, denatured alcohol cleansing is the ultimate.

Care should be taken to make sure that layered pieces of glass do not hang over the edge of the base glass. During resoftening of the base glass, expansion takes place which may leverage the cover glass and cause fracturing where it sags over the lower piece.

After your pieces have been cut and cleaned it is a good idea to tack the pieces in place with a very small dab of Elmer's glue for ease in transferring the project to the kiln. If too much glue is used, it will leave a residue between the layers of glass when they fuse.

Devitrification can be prevented by using an overglaze such as Spray A or Flux 92 available from any distributor carrying fusing supplies. Alternatively, you may make your own overglaze by dissolving Borax soap in water (a supersaturated solution). Spray these solutions on with a spray paint air gun which can be purchased from a variety of sources for less than \$20.00. We like the Badger brand with propellant which is stocked in most hobby and toy stores (very useful for model builders). The most certain way to prevent unsightly devitrification is to place a piece of clear glass (same compatibility, of course) as a cover for the project. This will allow a layer of clear to be the outermost surface. It also adds to the depth of the project.

Configuring the kiln

There are many kilns on the market and a variety of sizes. All seem to work whether top loaders, front loaders, top mounted elements, side elements, etc. For temperature control it doesn't really matter whether you use a peephole to watch for the bending of a clay pyrometric cone, use a kiln-sitter, pyrometer, or a combination of the above.

The kiln with which we are the most familiar is manufactured by Paragon of Mesquite, Texas. These kilns are specifically developed for glass fusing with top firing to provide even heat for the flat glass. Should you purchase a kiln, we recommend one at least 14" in diameter (so you can slump 12" dinner plates). The kiln-sitter is a valuable option as it allows you to turn the kiln on and leave. The kiln-sitter will automatically shut it off when a pre-set temperature has been reached.

A pyrometer is a useful option but a bit expensive. It is necessary for fusing thick projects since you'll want to turn the kiln back on in the annealing range to heat soak the project and eliminate the possibility of stress produced by too rapid cooling.

Whether your kiln operates off standard wall current (120 volts) or 220 volts is immaterial unless you're in a hurry. Then you'd better pay an electrician to wire the more powerful current since with wall current you're destined to be an overnight fuser.

For fusing Merry Go Round glass, we use a kiln sitter with a pyrometric cone (015) which shuts the kiln off at 1549 degrees.

We use a cone "019" for bending and slumping Merry Go Round glass at 1333

degrees. In order to get similar firings using a kiln-sitter, it is important to always place the cone for the kiln-sitter in exactly the same way each time. It is recommended that you have at least 3/16" of the thick end of the cone extending past the cone support to enable the kiln-sitter to shut off before overfiring results.

Using the kiln

Do not place the project on the bottom of the kiln! Always use a kiln shelf that has been raised at least an inch from the bottom of the kiln. Placing your glass piece directly on the bottom of the kiln will not allow it to get enough heat to fuse. Also, if the slight chance of kiln malfunction and overheating occurs, the superheated glass will ruin the kiln. If this happens on a shelf, it is only necessary to replace the shelf.

Make sure the kiln shelf is smooth and not pitted. A rough shelf will result in a fused piece that has an uneven, distorted bottom surface. This results from the fused glass running into the depressions on the uneven surface of the shelf. A proper application of shelf primer will smooth over minor pits or depressions on the shelf.

Before heating glass to its softening point it is also necessary to treat the shelf of the kiln so that the liquid glass does not stick to the shelf after it has been cooled to a solid state. Several shelf primers are available or you can make your own by mixing equal parts alumina hydrate and kaolin with five parts of water. These chemicals are available at ceramic shops as are the premixed commercial primers. Traditional ceramic "kiln wash" should not be used as a shelf primer as the grit is too large. Prior to fusing, the shelf primer must be brushed on the shelf and allowed to dry.

After fusing, the shelf primer must be scraped from the kiln shelf using a spatula or a ceramic sanding mesh (Fabricut 100 Grit, a carbide impregnated cloth with an open weave). A new coating must be applied prior to the next firing. It is actually not always necessary to remove old primer and reapply each time, but it is a good precaution that only takes a few minutes and will insure that your project will never stick to the shelf. Since slumping over a mold is done at a lower temperature,

reapplication of shelf primer is not necessary each time for this process.

Our cookbook for fusing

After extensive testing, the following are our most successful and reproducible results with Merry Go Round Glass. Using a Paragon GF kiln with an 015 cone and kilnsitter, we turn the kiln on "low" for 20-30 minutes with the door to the kiln partially open. Then the temperature is increased to "medium" for 30 minutes with the door still propped open an inch or two.

This allows the "trash" which may have been in the kiln or on the surface of the glass to burn off and the ash escape. It also prevents fumes which may have been in the kiln from contaminating the project by altering the surface shine of the glass. After this initial warm-up, the kiln is turned to "high" and the door is shut.

After the kiln-sitter shuts the kiln off, allow the kiln to cool down on its own without opening the door. Its OK to look during heating but after the kiln shuts off, it's forbidden. The temptation to peek is not so great if you are home in bed! The annealing (cooling) cycle cannot be rushed without risk of the fused piece cracking immediately because of thermal shock or fracturing later due to delayed stress.

The total time invoved in the fusing cycle is ·5-5 hours to reach temperature and 4-6 hours or even more hours to cool to ambient temperature. This process is significanty shortened if your kiln runs off 220 volts. The experienced fuser learns other short cuts by cooling rapidly (i.e. opening the lid) in non-critical times. The piece should not be removed from the kiln until it is less than 200 degrees. The thicker the piece the longer the cooling that is needed. The principle of annealing glass to remove strain is that the glass must cool at equal rates throughout its thickness. If the surface is cooled faster than the interior, internal stress will fracture the piece. The stress can reveal itself immediately if the cooling differential is gross or can produce delayed shattering if the differential is more subtle. Extra thick projects (an inch or more) may need the kiln to be turned on "low" for a brief period at 1050 degrees to heat soak the project and prevent too rapid a trip through the

annealing point. You will need to have your kiln configured with a pyrometer for these thick projects.

Patience is the key word in fusing and most of the mistakes are made in too rapid cooling – provided, of course, that your glasses were compatible.

In the past fusing was time-consuming and short on immediate aratification because of the endless testing for compatibility prior to starting the project. There is no question that this necessity for pre-testing limited the craft's appeal. Hopefully, eliminating the need for experimentation to determine compatibility will encourage more people to try this tremendously satisfying craft. For the first time, the craftsman will be able to design a project and pick out the glass just as is done for the leaded glass panel. The real bonus will be, however, that glass fusing is actually much faster than window fabrication, and a great user of previously uneless scrap. Most importantly, we can stay interested in glass when we're out of window spaces to fill.

CONTEMPORARY TEAPOTS SALE/SHOW – LOS ANGELES

The Museum Store is going to feature a Contemporary Teapot Show for the opening of the new Museum of Contemporary Art, Los Angeles. Functional and non-functional items are okay. Items are to be bought and/or taken on consignment depending on price. Teapots must be available for November 1 1986 delivery. Slides/photographs are okay and will be returned. Please enclose a stamped, self-addressed envelope. Send materials and be sure to include a price-list to – Dory Dutton, Store Manager, Museum of Contemporary Art Store, 152 North Central Avenue, Los Angeles, California, 90012, USA.

TECHNICAL PAPERS

Several people are writing papers on various technical aspects of glass which will be of great use to many people. These will be available at the conference, and time has been allocated during the conference for these to be discussed.

If anyone feels they have access to any information or have developed any techniques which would be of interest, would they please consider writing a piece which could be included in these papers.

Any submissions would, I am sure, be much appreciated by all members. Please send any information to me at:

Meat Market Craft Centre, 42 Courtney Street, North Melbourne, Vic. 3051

Richard Morrell.

STAINED GLASS BOOKS

David Turner has contacted a couple of book dealers in America, information of which is below:

The Book Exchange – James Iraggi, Prop. Specialising in Glass Publications. Claims the largest assemblage of Stained Glass books, including impossible to get items such as – THE LOST ART by R. Sowers. Catalogue available. 90 West Market Street, Gorning, N.Y. 14830.

In particular ...

THE LANGUAGE OF STAINED GLASS by R. Sowers.

Available directly from publishers – International Specialised Book Services, 5602 N.E. Hassalo Street, Portland, Oregon, 97213 – 3640.

Cost as at 1/10/1985 was \$US27.50, with 40% discount for 10 copies, which at an exchange rate of .6615 worked out to be A\$26.69 per copy; it would be dearer in August 1986 by \$1.30 per copy.

THE WATER JET CUTTING MACHINE STORY

by Julie Brand

I visited the Matpro plant in the industrial wasteland of Port Melbourne. Matpro houses a number of machines that can be programmed to cut almost anything. The table below indicates the scope of materials that can be cut.

The 400 watt laser was cutting 3mm lexan (a type of acrylic) for an antenna company. The 1000 watt laser was cutting asbestos encased rubber gaskets for industrial application. The abrasive water jet machine was cutting 10mm aluminium shapes for a satellite tracking station, using garnet as the abrasive. These machines are BIG and cost in excess of \$350,000 each (but they probably come in designer colours for the aesthetically aware potential purchaser...).

A scale drawing of the particular shape is required by Matpro, who then programmes that shape to the machine which best suits the material being cut. The abrasive power water jet cutter is the appropriate machine for glass. About 50,000 pounds per square inch of water with garnet comes through a 5 thou faucet to cut almost any thickness of glass. Then it's a simple matter of the machine's operator positioning the material to be cut (the material is supplied by the client) and pressing the green starter button.

There is a \$100 minimum charge for use of the abrasive water jet cutting machine. For purposes of clarity, an example of a 6 inch high letter "S" cut out of 1/2" plate glass shall be called a "unit". The programme to cut this and 6 other units would be covered by the \$100 charge. Thereafter, each additional unit would cost \$12.

Every glass cutting case is individual and has to be costed as such, but the above prices are applicable in August 1986.

The newly cut glass edge which results from the process only requires flat polishing and is absolutely accurate no matter what thickness of glass is used. The location of Matpro is: 391 Plummer Street,

Port Melbourne, 3207 phone: (03) 646 3020, and the staff are happy to be of as much service as possible.

RANGE OF MATERIALS PROCESSED BY MATPRO LIMITED'S FACILITIES

	Plasma Arc	Laser	Pure Water Jet	Abrasive Power Jet
Mild steel	•	•		•
Stainless	•	•		• .
Non-ferrous	•	•		
Galvanised	•	•		•
Titanium		•		•
Acrylics		•		
Asbestos		•	•	•
Ceramic tile		•	•	•
Formica	_	•		
Glass fibre		•	•	•
Micalex		•		
Perspex		•		
Plywood		•	•	•
Silica		•		
Rubber		•	•	•
Pre-impregnated plastic			•	
Carbon fibre			•	•
Aluminium	•		•	•
Carpet			•	•
Felt			•	•
<u>Leather</u>			•	•
Cloth			•	•
Composites			•	•
Cork			•	•
Graphite			•	•
Kevlar			•	•
Latex			<u>•</u>	•
<u>Laminates</u>			<u> </u>	•
PVC		•	•	•
Thermoplastics		•	•	
Bronze	<u> </u>			•
Copper	•			•
Epoxy resins			•	•
Glass				•
Marble				•

(Source: Brochures for these cutting systems)

Many criteria will affect the choice of the cutting medium to be used for a particular application. These will include – edge, finish, speed, material, cost, and an understanding of the customer's requirements.

ARCHIVES

Are there any copies of Ausglass Newsletters Nos. 1 to 7 in existence? If there are, the official Ausglass Archives require original copies, or photocopies to fill out the records. Please respond to:

> The Secretary, David Turner, 143 Church Street, Brighton, Victoria, 3186.

Underglass Painting, Nicholas J Florescu, 14 Ewan Street, Gold Coast, Queensland, 4215

I am interested in a particular art form – underglass painting – and would like to contact other painters in Australia who practice this technique.

Please reply to the above address. Kind regards. . .

FOR SALE

Allan Crynes has 1" Duraboard (ceramic fibre board) for members at \$15 per sheet. Telephone (056) 83 2488.

HUMAN INTEREST

Congratulations to Ede Horton and Anthony Gross who had Max on May 17 1986 – and he's real cute!

Our treasurer par excellence Reg Loats, was presented with the highest Rotary Award and is now a Paul Harris Fellow. Reg received the award for services to Rotary and the community.

Richard Morrell will be opening his show at Distelfink Gallery in Hawthorn, Victoria, on September 23 1986. It's titled "A tribute to Ancient Glass."

EXHIBITION REVIEW

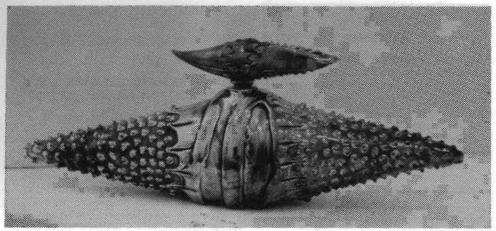
by John Grieg

RICHARD CLEMENTS AT DISTELFINK GALLERY, JULY, '86

Walking into the white exhibition room at Distelfink my perception of the colour balance of the show was quite distorted by the absolute profusion of little red stickers. which gives some indication of Richard's sustained popularity amongst glass collectors, many of whom have several pieces made by him over the years. Richard is certainly the most exciting lamp worker around, and his best pieces would stand up well next to small glass vessels produced in any period of the long history of glass. Manipulating the glass over a small gas flame, Richard mixes in his own secret colours to achieve a very dense and delicious patterning which is combined with brilliantly clear optical qualities. In terms of personal visual delight, his range of effects is quite dazzling. Including a profusion of swirls, dots, trails, prunts, cuts and casing, his most masterful effects (besides the

ability to make the glass appear to be pitted rock or iridised metal) are his very refined colour harmonies and transitions. These often run into deep clear areas and create an almost living glow within the depths, giving the pieces a very strong, convincing presence. The variety of small forms created include wry little tea-pots, stoppered bottles ranging from the functional to the fantastic, goblets, vase-like forms, and a few pieces that took his implied imagery to the point of creating actual figures similar to whimsical alass cartoon characters. As an example of this, many beautifully bizarre bottles evoke undersea life – there are very fluid shell shapes, deep limpid pools that look like primitive life forms under microscope, and assertive crustacean wrappings with bold pointed stoppers reminiscent of claws, talons and flames.

Some of the strongest and most dense vessels carrying this bold imagery were reserved for the Wagga glass collection



Richard Clements 1986

and the National Gallery of Victoria. Where these implied abstracted images were actually used to create cartoon-like personalities (like the tea-pot with clawed feet and the big comical snail) I felt that all the hypnotic power was drained away. All the other pieces with very pale colouration, very large cuts and slashes, and the large goblets (possibly blown from a furnace) left

me ambivalent. It is perhaps no coincidence that the red stickers appeared less frequently next to these works.

Nevertheless, Richard Clement's best work is immensely strong and will no doubt be revered for untold years to come. The most collectible delicious prettiness of these pieces is always well balanced by the wry assertive, almost prickly, evocations.

SCOTT COUCHER REVIEW

by Con Aslanis

(Con Aslanis is 38. He was born in Athens and educated at Preston and Prahran Colleges of Art. He was one of the founders of All Australian Graffiti and has been freelancing as an illustrator/designer for the last few years. I asked him to review this show because he comes from outside the craft sphere and perhaps is therefore able to draw more pertinent observations, drawn from the point of view of another art consciousness.)

At first sight Scott Coucher's glass works have an unmistakable Japanese influence. Even the titles of the work suggest so. Of course, one doesn't normaly associate Japan with glass art, but here Coucher has adopted the elegance of the Japanese form

in the vases and platters. Bamboo and Japanese writing characters frozen in glass adorn much of the work.

And yet one senses that Coucher is beginning to explore more than mere elegance for table top objects. He's experimenting with materials that traditionally do not belong in the periphery of glass aesthetics. This is best illustrated in his piece "Precious Ambient Packages" which I feel is the best work in the show. Three identical bulbous containers, frosty caramel in colour, are wanting to escape from their chequered wired skin. They are resting on a piece of weathered rock, and roped together by straw string.

These are warm, elegant, tactile glass works leaning comfortably towards sculpture, rather than just decorative glass objects. I'm looking forward to his next exhibition.

WARREN LANGLEY REVIEW

DRUID SITES EXHIBITION

by Darani Lewers

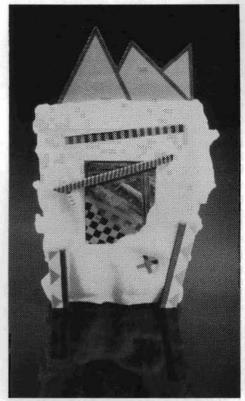
Warren Langley's exhibition at Gibson's Gallery (July 12 – August 12) highlights some of the issues facing contemporary glass artists. His work has been shaped by the environment of the last two decades. Indeed, Warren's background is similar to that of a number of glass artists currently practising.

The seventies was a period of massive social, political and economic change. The newly created Crafts Board of the Australia Council, together with the Crafts Council, supported training opportunities and the establishment of an extensive cultural exchange program between craftspeople. The glass movement emerged as a small but significant force in the late seventies, building on the earlier tradition of stained glass to include blown and kiln work as major practices.

Warren has been involved in making glass since the early 1970s, becoming a full time practitioner in 1977. He has taken an active part in the exchange of ideas and skills within and between glass workers in Australia and overseas. Since 1977 he has established a glass workshop working with blown glass until eventually concentrating on fused and kiln work. His more public commitments relate to teaching and one major residency. At the same time Warren has undertaken architectural commissions and produced functional and sculptured work.

Warren titles his work at the Robin Gibson Gallery the "Druid Sites Exhibition". He says that although he was inspired by the prehistoric megaliths and connections apparent with the New York skyline, such references are no longer relevant to the final outcome of his work. Rather, his sculptures take on a life of their own and become spiritual icons or personal shrines and rituals.

The use of multi-coloured glass as a decorative element and the historic references place this work in a



Warren Langley fused glass 500mm high

"post-modernist" tradition. It is interesting to note that "making work accessible" is an important tenet of post-modernism. Yet the highly personal content of Warren's sculptures prevent ready

appreciation by the public. The sculptures are made for a specialist glass audience. The self-referential nature of much of the work in the visual arts today relates to the issue of the value of the arts and their place in society. Perhaps if Warren had chosen visual references relating to his personal background (i.e. life in Australia) rather than the history of other cultures, then the spiritual content might have carried a greater conviction for me.

Moving to another issue relating to the selection of the appropriate material used in the expression of ideas, it is worth noting that Warren may have used a material other than glass. The special qualities of glass like its optical illusion, mystery and translucency, are not used to express the spiritual intent of the work – the sculptures are in fact quite dense and static objects. Warren has pointed out that the sculptures do come alive and glow if the appropriate lighting is used.

Another important issue relates to the appropriate context for these sculptural pieces. As two dimensional objects they are really more suited as wall reliefs. Warren has conceived these pieces as marquettes for larger works in architectural spaces. He has developed a process of kiln built sand moulds and coloured fused sections of glass which will also be suitable for the production of large scale work and small functional ware.

Warren's ability to use his technical innovations is an important lesson for other practitioners. Also he has an impressive record of supporting himself from a craft base such as glass. This is in marked contrast to the poor record of painters and sculptors who are dependent upon the personal taste of gallery dealers for promotion of their work. Perhaps such work is also tied to a more rigid tradition which thwarts the flexibility existent in other crafts.

Warren has already worked with other glass artists on several projects. Perhaps his next move might be a collaboration with people from other media. The benefits of such a move is exemplified by the partnership between ceramicist Graham Oldroyd and painter Michael Ramsden, which has resulted in the development of a new material and visual imagery suitable for wall murals. Warren's experience and enthusiasm would make him an ideal partner with whom to join and venture into new areas.

Darani Lewers Craftsperson 43 Seaforth Cres Seaforth 2092 NSW

RICHARD CLEMENTS' VIEW

I would like to comment on John Greig's review of Vicky Vidor's exhibition. After reading it my immediate reaction was "that's a bit savage, ol' son...." On closer scrutiny the part that raises one of my eyebrows slightly higher than the other is the first two paragraphs. After these John gives a very reasoned and objective opinion of the show (which I did not see).

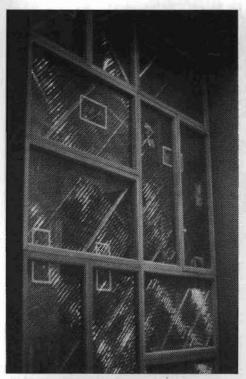
One statement I found particularly unfortunate was "...it's rather like offering fairy floss to a starving family." Are the more aesthetically aware in our society really starving for art? If so, I would suggest they go out and buy more of what is available to encourage more production. It is a pity the vast majority of practising professional craftspeople have to make "pretty things" (for this is what sells) — and more often than not these do not go hand in hand with "art".

Perhaps John is not quite correct when saying "...and yet with solo exhibitions being so rarely offered...." The truth is that all one has to do is run past any door of any art gallery and you're likely to be wrestled to the ground by the owner who wants you to hold a show.

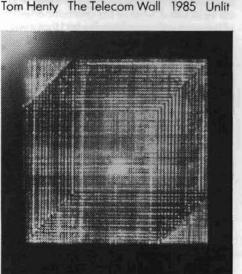
I do not want to give the impression that critics should not write what they feel — on this matter I'm in complete agreement with John. Heaven forbid a regression to the days where everything made in glass was hunky-dory, and everyone slapped each other on the back and pissed in each other's pockets. All you get from that is bruised shoulder blades and soggy socks. I just feel that on certain occasions a little more sensitivity can be used to bring the best out of a person, rather than make them feel nervous about their ability.

Richard Clements.

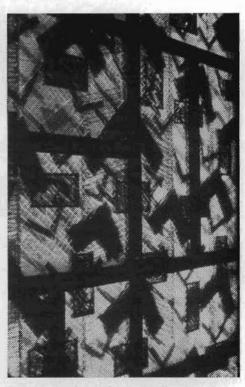
NOTES FROM A COUPLE OF AUSTRALIAN GLASSWORKERS



Tom Henty The Telecom Wall 1985 Unlit



Tom Henty Square Stack 1984



Tom Henty The Telecom Wall 1985 Lit

Except for a few domestic windows I have done no glass work for almost 12 months. Currently it's my final year of a B.A. (Fine Art) at Bendigo C.A.E. and in these last 12 months I have allowed myself the indulgence of full time "study". Therefore I'm consciously walking a parallel with glass at present and enjoying a relief from its particular and peculiar characteristics. But then again, I'm looking forward to November when I can pursue some of the glass-related ideas noted during the course. Thanks again for your letter and the work you do on our collective behalf.

Best wishes, Tom Henty.

P.O. Longlea 3551 Juy 11 '86

ADRIAN GEMELLI

My work over the last six months has embraced a wide range of materials and methods. As there is not sufficient space in the scope of an article such as this to adequately discuss all of these items, I have elected to cover in some detail one of my major projects, which is, however, still in the planning stages.

For the last ten years the media of glass, mirror and metals have captured my interest, involving me in a number of experiments and techniques using these media for murals and environments, e.g. refraction, reflection, altering spatial dimensions, texture, colour and spectra.

I feel it is important to develop my work by incorporating new technology. With personal computers and electronic components becoming more readily available to the lay person, I feel it is valuable to develop a familiarity with their use and to explore their applicability to arts and crafts, as I believe they offer vast possibilities and potential for commercial and community development.

My aim is to create a mural or environment which reacts and constantly changes according to the presence of individuals via sound, movement and location. This would be achieved by the use of mechanical and electronic components linked to a microcomputer which would be programmed to activate neon lights, light emitting diodes, strobes, black light and mirror movement to produce further random activity in and against a mirrored three dimensional mosaic wall.

The microcomputer has the advantage of allowing an enormous number of permutations of multiple visual effects. One possible scenario might be as follows:

A person moves into the ambit of the mural which is already reasonably active by itself, relying on reflections from the mirrors cut and placed at various angles to reflect neon and ultra violet light. As the person moves, light sources are activated by infra red sensors which in turn activate collimated light sources. diffraction gratings, and bevelled mirror (cut 6mm x 10mm). This in turn would shower the room with thousands of rainbows striking light sensors. These sensors are activated by the blue end of the spectrum. There would be other sensors activated by the red end of the spectrum. These sensors would send messages to the computer which would be programmed to activate movement of hanging mirror pieces which in turn activate further sensors. Because the movement of the mirror and the light it reflects is a variable, several events could occur. For example, neons and light emitting diodes might react in a certain pattern.

Because the work responds to variations in its surroundings, its appearance will be as varied as the manner of arrival of those who come to see it. One of the dramatic effects of the work will result from the fact that it will become more active and brilliant as the level of activity or the volume of noise of the spectators rises. It will function in dynamic harmony with its surroundings.

Because of the innovative and complex nature of the project, there are certain cost penalties in its realisation. The costs, however, need not be as prohibitive as one might at first imagine as much depends on the precise choices of materials, positioning, size, etc.

A rough approximation of the probable cost of a mural 3.5 metres square by 1 metre deep is in the order of \$28,000 to \$30,000. Much of this amount would in fact be able to be amortised over several such murals, as there would be a considerable amount of developmental computer programming required in the first instance which would only need minor modifications for subsequent projects.



Adrian Gemelli

Other factors that would influence costs in the future are the continually plummeting prices of electronic components. These factors could easily see the cost of future murals or environments of this type reduce to something in the order of \$18,000 to \$20,000.

Because of the interactions which occur between the multi-media mural and human involvement, the project has both community and commercial applications. Some examples of suitable locations for such a mural or environment are foyers, concert halls, community centres, airports, nightclubs, restaurants, home environments, railway stations, city squares, outside plazas.

Further development could include the coupling of a synthesiser to the microcomputer and its various programs, using light, sound and movement to produce musical and visual impact.

This type of musical/visual coupling could find applications in locations such as stairs, dance floors, dining tables of translucent marble which become brighter as conversation progresses, fountains which react to an individual's presence, varying the flow of water, the light and the sound.

There is also scope for total environments linked into other electronic devices such as videos, tape decks, movement of people, etc. These environments would be programmed to produce ambient sound that might be chosen for its soothing effect on the individual.

These are but a few examples of the sort of thing that could be achieved with this kind of work. The possibilities are limitless. I see no reason why our environment need be static when our emotions and moods are constantly changing. New technology offers us the possibility of changing our aesthetic environment to almost anything we want.

Of course, this kind of project produces special kinds of questions that architects must resolve. What is the effect of such a work in the context of an overall design? We might reflect on the comment of Le Corbusier to the effect that the work of Michelangelo amounted to destruction of the architecture of the Sistine Chapel.

This project has been developed considerably through the planning and design stages. Unfortunately, the time has now come for the high cost parts to be commenced, and this is where sponsorship,



Adrian Gemelli 171/2' x 40' Glendonald School for Deaf Children

either private or public, becomes a necessity.

One of the illustrations shows a detail from a proposed neon and sound activated glass mural designed for Village Roadshow Corporation Ltd at their new Head Office in Bourke Street, Melbourne. This project is expected to proceed later in the year when economic conditions permit. The other illustration shows part of a large mosaic coloured glass mural created at Glendonald School for Deaf Children in Kew. This work was completed in 1984 and was funded under the Artists in Schools Programme with assistance from the Ministry for the Arts.