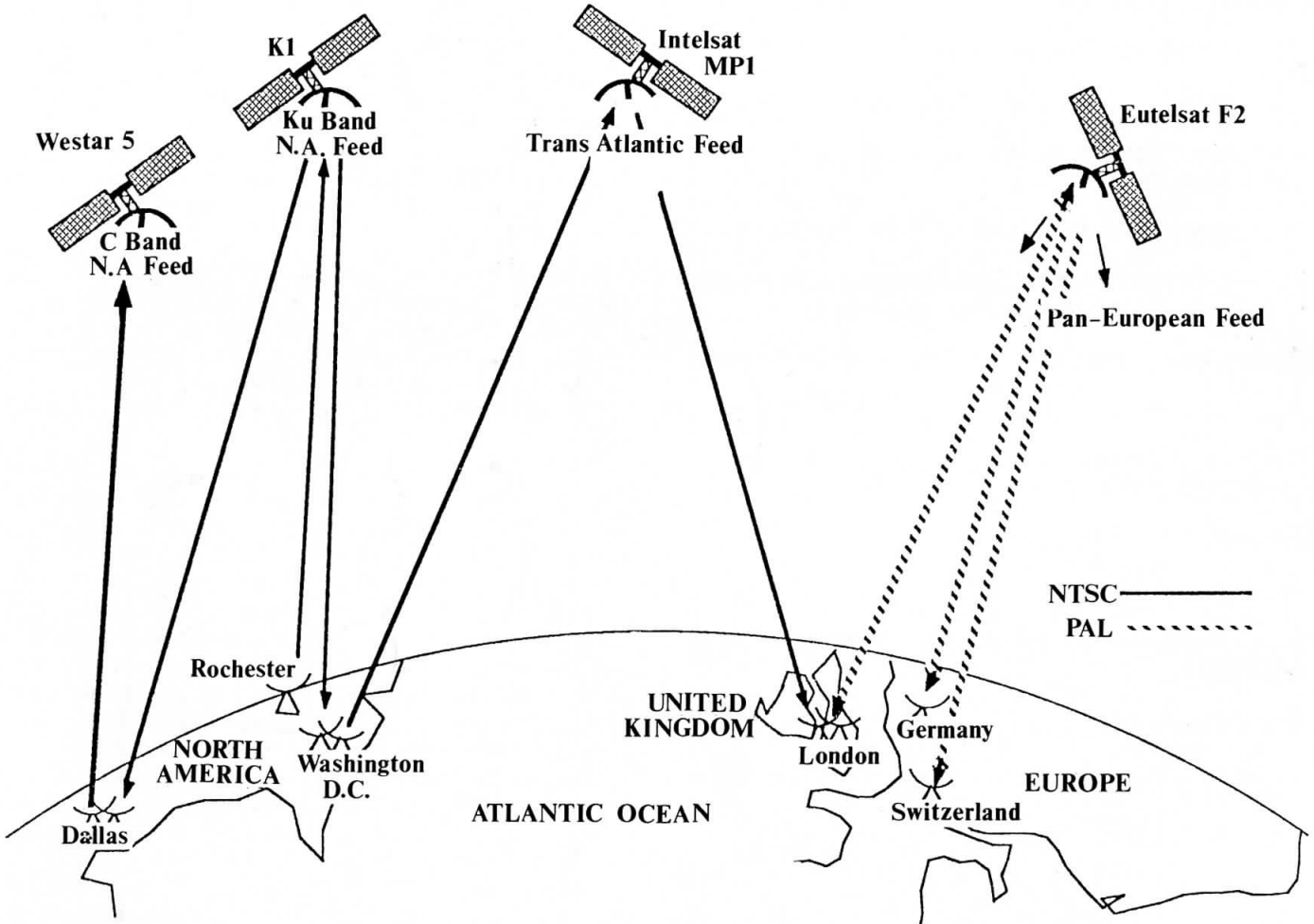


**PEG**

**Photographic Education News**

# Distance Learning



Typical Satellite Network For Kodak  
Photo-Education Videoconferences

Photographic Education News is Edited by Frank Hawkins and published by The Photographic Education Group. Contributions and letters to The Editor, "Broadmeadows" Scotland, Burton Overy, Leics. LE8 0DR. Design and production co-ordinator, Mrs Sylvia Barnes Design by Abbey Advertising Printing by Tradeprint

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PEG

Front Cover — Diagram of the Eastman Kodak Satellite Link

Dear Sir

In 1988 the L.E.A.G. GCSE was a pleasure to the teacher and pupils alike. They struggled cheerfully to make their portfolio of ten prints. I applauded their successes and tried to make light of the three or four week periods when they failed to achieve anything worthwhile. They pushed me along. We had a printing day during the Christmas holiday and another one at Easter. We often stayed at school until 7 pm., and occasionally until 9 pm.

The practical exam was interesting and they tackled it with verve. The theory slotted in very well. They each had a copy of that part of the syllabus about a year before the exam and picked up the information as a result of their developing interest. My contribution was minimal, a twenty minute lesson on the difference between condenser and diffuser enlargers and fifteen A4 pages of typed notes a fortnight before the exam to dot the 'i's and cross the 't's.

The pupils were a mixed ability group in a Secondary Modern School and their results reflected their enthusiasm. Two A, three B, one C and two E grades, and most important of all, the majority of them are still keen photographers and three of them have darkrooms.

Many children opted for the subject starting again in September 1988 for the 1990 exam. I said ten was the maximum number I could take and my arm was twisted until I agreed to take twelve. The 1990 L.E.A.G. syllabus arrived in October. What a black day it was. The effect was numbing. What had happened to the winning formula of yesteryear.

The practical portfolio of ten prints replaced by five units of work with considerable emphasis given to the planning stage. One can only assume that means writing about the work detailing the way it was approached. How many prints are needed for each unit? One, five, ten! Very little guidance is given. The practical exam has gone and is replaced by a Critical Study. More writing. I haven't looked closely at the theory yet, I lack the courage. I took the new syllabus to show a senior lecturer in Photography at the local Art College. He could understand my concern and suggested that I switched to City and Guilds 9231. We had the information, but the pupils didn't want to change. They had seen the exhibition of last year's work and wanted to strive for something similar and since the subject had been billed as GCSE in the 'Options Booklet' and the parents pay about £30 a year for materials I didn't have much choice. ►

The subject now faces the problems of many other subjects when tackled by non academic pupils. They are producing their pictures, but I haven't seen much written work and of course I've started to nag them. Surely the formula was right in the first place. Photography for a fourteen year old is **all** about learning by doing.

Yours sincerely  
S K Dennis  
Laverstock, Wiltshire.



Dear Editor

### **A Level Photography goes from strength to strength**

Photography, as part of the sixth form A Level GCE curriculum continues to gain in popularity and in acceptability by higher education and industry alike. Recently, the University of London has joined other universities in accepting the subject for general entry to degree courses. At the same time, the Associated Examining Board, which currently offers the only A Level in the subject, has made an arrangement with Volkswagen UK for an annual photographic award, whereby the five top candidates are invited to work to a commercial brief, prepared by Volkswagen, and to submit their work to be judged by senior personnel in the world of advertising and photography.

Last year, the competition was won by William Bateson of Blackburn College. At 34, William may not be a typical A Level candidate, but then he is not so unusual either. Indeed, over 23% of AEB A Level candidates were 21 or over in the June 1988 examinations. We look forward with interest to see who will win the competition out of this year's entry of 1320 candidates.

Yours faithfully  
P T Williamson  
Head of Visual Arts and Technical Subjects.  
The Associated Examining Board.■



**Philip Gee** Congratulations to Philip on gaining the Associateship of the BIPP in the Education category. He is in charge of photography at Yeovil College Somerset where he has pioneered work with FE Special Needs students.

**Nick Heddle** is in charge of the Cambridgeshire Centre for Photography based at Huntingdon Technical College. His brief includes vocational courses, servicing, adult education and INSET provision. Nick also gained the Associateship of the BIPP in Photographic Education.

**Nigel Earthy** is a recently joined member based at Boston College of FE in Lincolnshire. Nigel was appointed at Boston after completing the PQE course at Derby.

**Sidney Ray** is senior lecturer in photographic sciences at the Polytechnic of Central London where he teaches applied and photographic optics and courses on scientific photography. He is author of a number of photographic books including Applied Photographic Optics and co-author of The Manual of Photography both of which are reviewed in this issue.

**Michael Duffett** is Chief Photographer at the Tate Gallery and founder chairman of the Association of Historical and Fine Art Photographers. The work of his department is largely of an educational character and he is hopeful of encouraging functional links between AHFAP and PEG.

**Terry Norris** well known for his work at Little Ilford School in the London Borough of Newham.■

### **Report on the Photo Labs**

The Final Report of the PHOTO LAB TRAINING CITE is now available from Fred Dustin, Photolab Training Unit, London College of Printing, Elephant and Castle, London SE1 6SB.

## AMERICA

### Society for Photographic Education

The SPE National office has moved, the new address is:-

Executive Director, Judith Thorpe. Campus Box 318, University of Colorado, Boulder, Colorado 80309 USA (303-492-0588)

### SPE National Conference 1990.

Santa Fe New Mexico. March 15 — 18  
Theme: 'Enchanted lands/Contested Turfs: Photographic Education and Image Making in the 1990s' Travel to Albuquerque Airport 65 miles Santa Fe.

### SPE Members Directory and Resource Guide 1989 is available from the PEG Office.

**Archival materials** A comprehensive 72 page catalogue of archival materials for photography is available from 'Light Impressions' 439 Monroe Avenue, Rochester, New York 14603-3717

### Rochester Institute of Technology — R.I.T.

#### Note of a visit by Ian Smith of Salisbury College of Art

The purpose of my trip was to consolidate the relationship between Salisbury College of Art and R.I.T. to investigate the structure and philosophy of their courses and to discuss the possibilities of developing an exchange programme.

#### General information

R.I.T. was founded in 1829 and is a privately endowed, co-educational institution comprised of nine colleges. It may be compared in status with a U.K. polytechnic. The campus occupies 1,300 acres in suburban Rochester. There are 8,500 undergraduate, 1,450 post graduate and 4,500 part time students.

R.I.T. offers associate degrees (usually two years), full degrees (four years) and masters courses.

### THE SCHOOL OF PHOTOGRAPHY

The section of this massive empire with which we are developing a link is the School of Photographic Arts and Science. This along with the School of Printing and Centre for Imaging Science (don't mention the C.I.A.) make up the College of Graphic Arts and Photography (one of the nine).

Looking back to its origins the School of Photography started in 1930 at the Rochester Athenaeum and Mechancis Institute (to become R.I.T. in 1944), to fulfil a local industrial need for the instruction in aerial photography and other technical aspects of the medium. Under the direction of none other than C.B. Neblett, other programmes were added in commercial and specialised areas.

Being just one small section of R.I.T. it is a little easier to get to grips with. Even so, it is possibly the largest school of photography in the world, with 50 members of staff (faculty), 750 undergraduates and 42 graduates. There are 150 individual darkrooms, 50 studios and nine vast laboratories.

Within the School courses (programmes) are offered in:

1. Biomedical photography.
2. Film and video.
3. Imaging and photographic technology.
4. Photographic processing and finishing.
5. Professional photographic illustration (P.P.I.) — a general photographic 'core' programme with specialised options (majors) in:
  - a. Photography as fine art.
  - b. Contemporary/illustrative/commercial photography.
  - c. Narrative/documentary/editorial photography.

Each programme is organised within its own department. The head of department is an internal appointment that can be rotated within the department faculty. ▶





### Course Structure.

Each programme is made up of a number of courses each lasting between one and three terms (quarters). It is a programme number 5, Professional Photographic Illustration that we are most likely to receive students from and apart from the specialised film and video programme, are most likely to send students to.

Listed below is a typical layout for a programme in P.P.I. majoring in contemporary/illustrative/commercial photography.

(note: years one and two are core studies and are common to all three P.P.I. programmes)

<b>Yr. 1. Applied Photol</b>	<b>21 credit hours</b>
Creative problems	6 credit hours
Intro to colour	3 credit hours
Design for photography I	6 credit hours
Liberal arts	12 credit hours
<b>Yr. 2. Applied Photo II</b>	<b>15 credit hours</b>
History & Aesthetics — photo	9 credit hours
Design for photography II	6 credit hours
Materials & processes of photo	9 credit hours
Colloquia	1 credit hour
<b>Yr. 3. Contemporary/illust/comm I</b>	<b>15 credit hours</b>
Photo electives	12 credit hours
Art & civilisation	9 credit hours
Liberal arts	12 credit hours
<b>Yr. 4. Contemporary/illust/comm II</b>	<b>15 credit hours</b>
Photo electives	12 credit hours
Hist. of applied photog.	3 credit hours
Liberal arts elective	12 credit hours
Liberal arts (senior seminar)	2 credit hours
Small business marketing and planning	4 credit hours

### Assessment.

The 'credit hour' is a unit used for assessment and is not a description of the length of time a student spends on a particular course. This is however specified. Each course description details the number of lab hours, lecture hours, studio hours etc. Each assessment unit (credit hour) receives a grading by an award of 'Quality points'.

**Grade A (Excellent) = 4 Quality points**

**Grade B (Good) = 3 Quality points**

**Grade C (Satisfactory) = 2 Quality points**

**Grade D (Minimum Pass) = 1 Quality point**

**Grade E (Condition fail) = 0 Quality point**

**Grade F (Fail) = 0 Quality point**

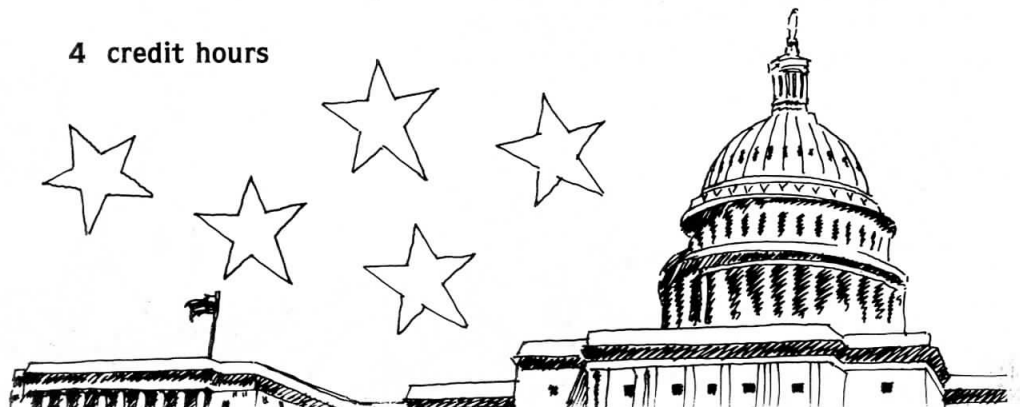
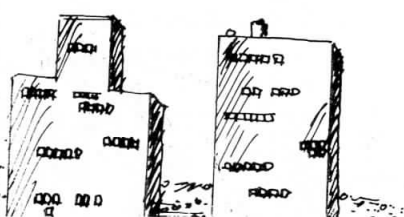
Further details of the assessment system are given in the 'Faculty Survival Guide' on circulation within the Department of Photography, S.C.A.

Each course is taught by one member of staff and several are taught simultaneously. Likewise students undertake up to five courses at any one time.

Many of the courses are repeated or similar substitutes offered during the summer quarter (during the summer break). These are optional for students who may use them to catch up if they have missed courses, perhaps due to illness or transferring from another course.

### Departmental management.

There are some interesting solutions to some of the determinedly insoluble problems which face many institutions regarding student supervision and efficient use of staff (faculty) time. One difficulty with colleges of F.E. is that they are neither schools where the principle of an inseparable link between the teacher and class is the norm, nor a University where an independent structure exists for facilitating students routine needs while the teacher manages the learning process. ▶



The system at R.I.T. for maintaining facilities is a senior technician (head of facilities) responsible for a team servicing and maintaining day to day workroom and teacher needs. His opinion is valued and sought on a wide range of matters effecting the school.

In addition, students from the later years of the course are employed to help with a variety of general duties from manning the stores (the cage) to mixing chemicals. A chosen few are accepted to the elite position of T.A. (teachers assistant). This is the role of a general aid, organising apparatus, undertaking photocopying and on occasions supervising junior classes. All aimed at leaving the lecturer free to optimise his or her contact time. Students are paid a modest 3.90 (about £2.20) per hour for this work and are able to use college facilities out of normal hours. They may not undertake paid duties for more than 20hrs per week.

### Opening times

Facilities — studios, darkrooms etc. are all bookable but for relatively short times. Usually no more than a day at a time. Students can be penalised severely for infringement by withdrawal of access. They must also provide all their own materials and studio accessories.

Facilities are open from 8.00 a.m. (classes start at 8.30) until 9.00 p.m. six days a week.

### R.I.T. A PERSONAL OVERVIEW.

R.I.T. is big. It has such a vast range of facilities, expertise and programme alternatives that it is awesome and at times overwhelming. It has a course and an expert on almost every possible aspect of photography. It has some of the most famous names as guest lecturers. Leading film and equipment manufacturers offer special deals to get their products into the student's hands and to be seen to be involved with the Institute. For all that, the

establishment is not without its problems. There is a formidable bureaucracy for both students and staff to contend with. They seem more vulnerable to minority pressure groups than in the U.K.

Being run on entirely commercial lines results in a considerable pressure to keep the student numbers high and this results in surprisingly little selection being possible. "\$15,000 and a steady pulse" was a frequent quote, followed by "and we'll wave the pulse!!" This also provides concern regarding standards although motivation amongst students appears to be good. With fees being so high, not surprisingly many feel considerable pressure to succeed.

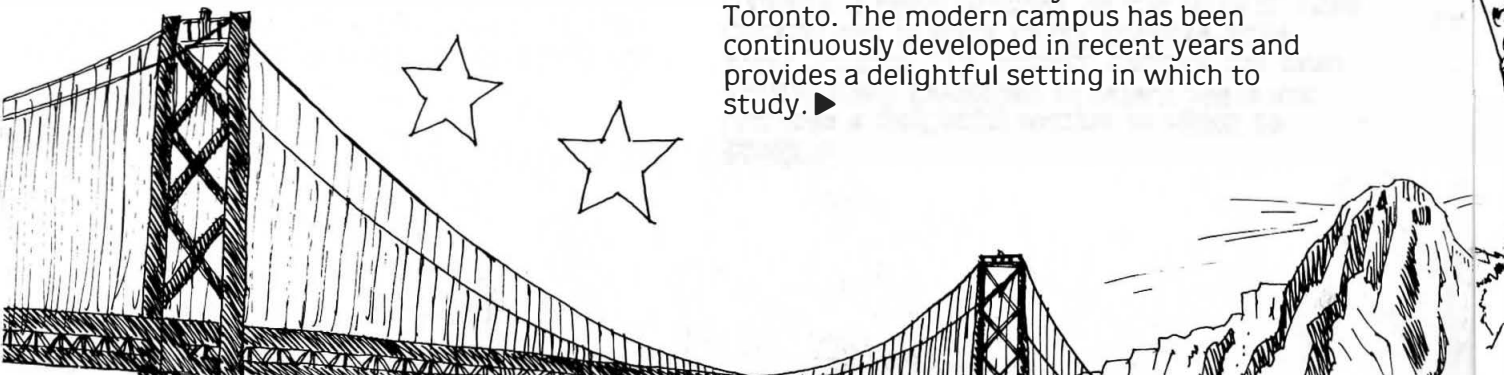
An additional problem is a lack of identity in such a huge place. 'We are just the last three letters of our social security code' was how several students expressed their feelings. The standard of work, from what I was able to see was, at the end of the fourth year, about equal to that at Salisbury at the end of the third. It is probably best to compare the four year programme as 1st = N.D. 2nd and 3rd = H.N.D. and 4th = P.Q.E.

There is a strong and formally structured input of photographic theory via the courses on materials and processes; taught by Leslie Stroebel it would have to be!! This may suggest a student's knowledge of this area to be better than at Salisbury. The same may apply to design, history and aesthetics and the liberal arts component.

## CANADA

### SHERIDAN COMMUNITY COLLEGE, OAKVILLE, ONTARIO, CANADA.

Sheridan College is a community college in Oakville, a town situated on the edge of Lake Ontario and is some thirty minutes drive from Toronto. The modern campus has been continuously developed in recent years and provides a delightful setting in which to study. ►



It is one of the largest institutions of this type in Canada and offers courses across a wide range of disciplines. It equates to a U.K. local college of F.E. But does not feature high level vocational work. Students are admitted from high school at 18 years and undertake a two year course, either mixing subjects or opting for specialised selection.

### Courses in Photography.

The School of Visual Arts provides courses in photography both for specialising students and as supplementary studies for others. The facilities are partially divided to give specialising students exclusive use of some workrooms. Staff too are assigned specifically to the teaching of service courses.

The course programme resembles a BTEC National Diploma course as does the level of work. A range of basic exercises covering fundamentals of the subject in the first year progress to slightly more advanced work in the second. Some time is given to 'option' projects with the student having a degree of choice over the work undertaken.

Students pay fees equivalent to hundreds of pounds per year rather than the thousands at R.I.T. Their fees for overseas students were less than those in the U.K.

Students pay for all materials and may borrow equipment from the stores which is operated in a similar way to most others in similar institutions. Interestingly, students are fined (and pay) real money for not returning equipment on time! A hire arrangement operates for some equipment, where for a reasonable annual fee, a student may rent a complete camera kit for the academic year, thus avoiding the stores routine altogether.

### A PERSONAL OVERVIEW.

The photographic course is staffed largely by first generation expatriates from the U.K. and Germany. Douglas Boulton, who initiated the link emigrated in the 1950's from Plymouth. Stan came from Birmingham and Robin King from Swindon.

All have reservations about the course and the educational environment in which it exists. They are undoubtedly hamstrung by a frightening bureaucracy, and web of laws, rules and misguided educational philosophies that would sap the enthusiasm of the most dedicated teacher of a vocational course with high aspirations for his students.

The course must accept pretty well all applicants. There is little in the way of a selection procedure and the staff, if an interview takes place are restricted by law from seeing any details regarding the students previous activities. Inevitably this ensures that a large number of students are unsuited to the course. This is borne out by the enrolment figures, usually around 100 which drop by almost half during the first year. It appears that documentation for attendance and assessment must be meticulous as students have significant powers of redress if they do not receive pass grades. A tutor may not allow one student to see the grades of another — by law!!

### Towards the future

Level of funding, high level of support services both administrative and technical, an excellent campus and a will amongst some staff to try and improve the course provide considerable potential. There are a number of well developed courses particularly in the newer technologies and a particular interest in computer graphics, although at present there appeared to be little integration with general photography.

We are pleased to be welcoming Douglas Boulton to Salisbury College for a return visit in June or July. There are no specific plans for a student exchange programme largely because of the difference in course levels. I believe strongly however that a continuing dialogue will prove to be useful to both institutions. ■





## Part Two

### THE POST WAR YEARS

After the return to peacetime training in 1945, the School unfortunately had to move from Farnborough into improvised accommodation at Farnham, only to suffer a second move in 1948 to Wellesbourne Mountford in Warwickshire. There it remained until October 1963, when it moved to temporary accommodation at RAF Cosford (joining the 'Photographer Boy Entrant' training which had been there since 1956). The construction of a new purpose built school building was soon to be completed there.

Since the war dramatic changes in aircraft performance and the wide coverage obtainable with modern multiple camera installations have brought about far reaching changes in air photography. The modern sophisticated equipment and techniques have also increased the complexity. It also follows that the training courses have become more comprehensive and intense to enable the student to achieve the required skill and knowledge.

### THE NEW ERA AND MODERN TIMES

On the 3rd of December 1965 the new building for the School of Photography was formally opened at RAF Cosford by Air Chief Marshall Sir Alfred Earle, KBE CB. Sir Alfred Earle was a former student back in 1930 and 1934. He had also been the Deputy Chief Instructor at the School and it was during that time he started the 'Boy Entrant' Training Scheme and the Senior NCO's Instruction Course. He flew most of the Senior NCO's attending those courses in the School's Avro Anson aircraft — up and down the Southern Railway taking overlap photography. He later became the Officer Commanding, No. 2 School of Photography at Blackpool.

The site for the new School was made ready by clearing an old hangar called 'Hinaidi East'. There was a great deal of careful planning to enable the latest equipment to be incorporated and it was the largest, most advanced photographic school of its kind in Europe. The first courses to be trained at the new School were of one years duration for 'Craft Apprentices' in photography. The skills included air film processing, printing and management of air camera systems. The students were also expected to be very competent with general photography including studio work, public relations tasks, exterior and technical subjects using sensitometric quality controls. The training syllabuses were

as far as possible related to civilian examination requirements.

In 1968 a 'single skill' Training Policy was introduced. A basic 'Air Photography Operator' course was devised to last seventeen weeks and produce a tradesman capable of operating air film processing machinery including electronic printing machines and installing air cameras into aircraft under supervision. Advanced courses were made available to tradesmen when they had qualified to Senior Aircraftsmen, in the skill of 'Air Camera Fitter' and 'Ground' (general) photographer. 'Air Photography Operators' who had been promoted to Corporal, were eligible for an advanced training course as 'Photographic Processing Analyst'.

The closure of the Royal Naval Air Station at Lossiemouth in 1972 brought about the formation of the Joint School of Photography at RAF Cosford when the School took on the additional tasks of training the Royal Navy and Army basic students formerly trained at Lossiemouth. It was perhaps inevitable that further rationalisation would take place as Tri Service School. In 1978 the air photography training was again revised to become a sixteen week basic course and titled 'Air Photography Processor 2'. This came about due to the sophisticated air cameras now requiring very specialised skills given over to the electronics training of the Air Radar Fitter who was made responsible for the 'optical sensors'.

The new 'APP 2' tradesman can apply for the advanced 'Air Photography Processor 1' course (thirteen weeks long) when he becomes selected for advancement to Corporal. There is an additional course held at RAF Hereford which covers Service disciplines and management aspects which he must subsequently attend before he can be promoted to a Junior NCO. The promotion to Sergeant follows a similar pattern with the advanced course for the 'Photographic Processing Analyst' (ten weeks long) and the subsequent Service management training course at RAF Hereford for Senior NCO's. The general or 'Ground' photographer undergoes a very intense course of 27 weeks duration covering all the aspects of studio, public relations, architectural, technical, portraiture, copying and an excellent colour phase. Some 'Ground' photographers are also responsible for staffing Lithographic printing shops therefore all students are given a basic litho course followed by an advanced course if and when they are required to fill such a post. There are advanced courses also available for Public Relations; Video, Cine and Audio Visual skills together with specialist colour courses. ▶



All students are given the opportunity as part of their course to qualify for the City & Guilds Certificates relevant to their trade. The Photographic Processing Analysts can apply for membership of the B.I.P.P. as Associate members. All other students may apply to the B.I.P.P., the M.P.A. and the R.P.S. through the normal qualifying procedures. It is a reflection on the training and their personal endeavors that many ex students have reached Fellowships of these organisations. There are specialist officer training courses to give an appreciation of management skills required for administering complex photo litho establishments both at home and abroad. There are also commitments to train foreign students of many nationalities.

## A SUMMARY OF ACCOMPLISHMENTS

In the first fifty years of its history the School trained more than 20,000 photographers, including those from twenty different countries. Many well known personalities have attended the School either in command or as pupils. Mention has already been made of Group Captain F.C.V. Laws who had so much to do with its origins and was Officer Commanding the School in 1924 as a Squadron Leader and later in 1933 as a Wing Commander. Reference has also been made to Air Chief Marshall Sir Alfred Earle and the following should also be mentioned. These include Air Marshall Sir Ronald Rees and Group Captain J. Bussey, a first World War pilot. He took the long course successfully in 1921 and later became the Chief Instructor. One of the famous Beamish brothers, Flying Officer G. Beamish was a student in 1927, but undoubtedly the most notable of all trainees was Aircraftman Ross (Colonel Lawrence of Arabia), but his stay at Farnborough was short lived and he left the Service before completing the course. He re-enlisted as Aircraftman Shaw and contributed much to the development of marine craft in the Marine Branch.

The first war sortie of World War 2 was a photographic operation, made on the day war was declared. Since that day much has been demanded of the Air Camera, and also of the men and women on whom its success so greatly depended. The inclusion in this article of an appreciation of the PHOTOGRAPHERS by Bomber Command may be forgiven...

"Shall history forget the PHOTOGRAPHERS... They toiled unceasingly and year by year the task increased; Squadron Camera Rooms, in the multiplying aircraft and darkrooms, as the first handful of F 24 cameras increased to a grand total of 3,000 and the miniature cameras for the radar numbered 600.

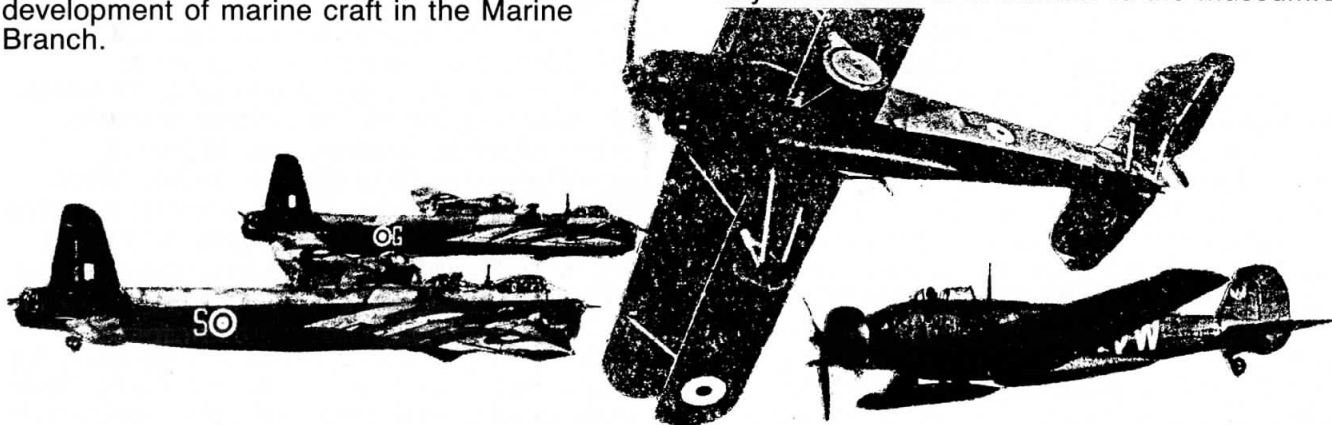
The first of the thousand-bomber raids in mid 1942 found them 'ready' at the operational and training units.

Colour photography, with its exacting demands for skill and care in all stages of the long process, was tackled successfully by our photographers who had no previous experience of this work.

Radar photography, requiring entirely separate treatment increased the flow of work by numerous miniature films.

And finally, the daylight offensive of the heavy bombers which came about as an addition to the night attacks and was on the same great scale, rising to a force of 1,107 aircraft between the six Operational groups alone. The skill, patience, ingenuity and endurance of all photographers had indeed been worthy of the highest praise".

There is a very unique museum within the School building which houses a collection of many items of cameras, equipments and remarkable photographs covering the history of photography in general and military photography in particular. Additional items are continuously offered from many sources and the collection must now be the most comprehensive of its kind. The curator, Mr David Jenkins, would be very pleased to hear from anyone who may wish to contribute any item which is of interest to the museum. ■



## PHOTOGRAPHERS' ATTITUDES to NEW TECHNOLOGY

### Peter Rolls

The British Journal of Photography has recently published the results of some research into the attitudes of professional photographers to New Technology (Ref.1). This article presents further material on the effect of educational attainment upon attitude to change, and gives other details which may be of interest to PEG members. The survey was carried out as a research project for the Department of Sociology at the University of Surrey. It is based on responses to a postal questionnaire from a stratified sample of 203 practitioners, representing the Commercial, Industrial and Public sectors. An interview programme was carried out with 50 of the respondents, including a number of full-time students at four colleges. This sub-group is not claimed to be fully representative of the student profile, but it gave a useful input from OND, HND, PQE and degree courses, as a supplement to the practitioners' views. It should be noted that this study sought to establish at first hand the attitudes of individuals: owners, managers, operators and assistants. It differs radically from surveys that ask employers what skills they require in their work-force. The pattern shown here may therefore reflect personal interests and aspirations, rather than immediate job needs. The possible conflict between these two perspectives is something to bear in mind throughout.

### Technical qualification

It is generally assumed that the educational process will encourage a positive attitude to change. The study gave general support to this view; Table 1 shows that respondents with higher qualifications are more likely to be 'interested' in new technology. They also tend to be less worried about its effect upon their job satisfaction (Table 2). Of course, expressing an 'interest' does not always imply uncritical acceptance. It was noted that students on the higher level courses had a greater tendency to question assumptions about the imperatives of change.

(Ref.1: 'Photographers and new technology'. B.J. Phot. 14-21-28 April, 1989)

Table 1 Relationship between Interest and Technical qualification

	NO quals.	OND level	HND level	PQE/ degree (n =)
<b>Very interested</b>	49%	57%	80%	76% (138)
<b>Interested to some extent</b>	44	37	15	24 (77)
<b>Slightly interested/ No interest (n =)</b>	7 (91)	6 (58)	5 (39)	0 (41) (229)

Although many unqualified people (49%) are Very interested, this level of enthusiasm is more typically associated with higher technical qualifications.

Table 2 Concern about the effect of NT upon job satisfaction v. Practitioners' technical qualification

	No quals	OND level	HND level	PQE/ degree
<b>Not a significant concern</b>	39%	39%	50%	78% (92)
<b>Little significance</b>	20	27	23	8 (38)
<b>Significant concern</b>	22	27	15	6 (35)
<b>Very significant concern</b>	19 (74)	7 (44)	12 (34)	8 (37) (24) (189)

Those with PQE or degree qualifications are much less likely to express concern about the effect of technical change upon their job satisfaction. Perhaps they gained 'something' from these courses which has increased their career-confidence. No doubt their Colleges would like to think so. But it may also arise from some pre-existing factors associated with the intake profile for courses at this level. Further study would be needed to unravel these possibilities.

These figures suggest (unsurprisingly, perhaps) that technical qualification has a beneficial effect, but it is just as useful to note that they are not a totally determining factor. A sizable proportion of those without formal qualifications also have 'positive attitudes.

### 'Pictorial' and 'technical' photographers

It might be supposed that 'technical' photographers are more likely than those in 'pictorial' fields to be interested in new technology. In order to test this supposition, ►

practitioners were divided into two categories:

(1) 'Pictorial' (e.g. Advertising, illustrative, portraits, weddings)

(2) 'Technical and scientific' (e.g. Research, medical, forensic, technicians)

Table 3 The attitudes of 'pictorial' and 'technical' photographers

(3a)	Pict	Tech
Very interested in NT	57%	66%
Interested	38	28
Not very interested	3	5
Not at all interested	1	-
Don't know	1	1
	(117)	(97)

(3b)	Pict	Tech
Optimistic about NT	18%	19%
Tend to optimism	43	43
Tend to pessimism	24	22
Pessimistic	15	16
	(110)	(94)

Table 3 shows no significant difference between the two categories, whether expressed in terms of their interest (Table 3a) or their assessed optimism (Table 3b). The majority of colleges may cater for the 'pictorial' markets, but they should be aware that New Technology is not something for 'technical' photographers alone.

### Concern about the effects of ...

The study established a number of items which typify New Technology for photographers. Respondents were then asked which items they 'would like to know more about' (Table 4a) and which were felt likely to have 'unwelcome effects' on their career (Table 4b).

Table 4 Attitudes to items of New Technology

Table 4

#### Items people would 'like to know more about'

Still video cameras	47%
Computer graphics	47
Video tape recording	36
Electronic publishing	36
Personal computers	29
Colour photo-copiers	19
Mini-labs	16
Automatic cameras	12
(N = 203)	

Table 4b

#### Items that are judged 'likely to have an unwelcome effect'

Still video cameras	22%
Colour photo-copiers	21
Automatic cameras	13
Computer graphics	11
Mini-labs	7
Electronic publishing	7
Video tape recording	6
Personal computers	3
(n = 197)	

Still video cameras feature at the top of both lists, but other differences in the rankings suggest that a wish to 'know more' does not simply arise from a defensive concern about 'unwelcome' effects. In several cases (e.g. Computer graphics, VTR, Electronic publishing, Personal computers) the relatively high level of interest may indicate that these are seen as areas for positive expansion. On the other hand, although Colour copiers and Automatic cameras are somewhat 'unwelcome', they do not arouse much sense of priority in wanting to 'know more' about them.

On the whole, the students' questionnaire responses differed little from those of the practitioners. However, some of their interviews raised issues which give a welcome breadth to the discussion:

- the irrelevance of much 'new technology' for developing countries
- concern for the social effects of technical change
- environmental consequences

One or two students spoke of the marketing implications of deliberately rejecting a 'hi-tec' emphasis, in favour of a more 'traditional-romantic' image for their future business.

### Problems and 'pressure'

As a supplementary to the question about wanting to know more, 50 interviewees were asked "Will there be problems in gaining this knowledge?" (see Table 5).

Table 5 Perceived problems in 'finding out' about New Technology

Finding time	56%	Getting access to equipment	4%
Expense	13	Feel baffled, inadequate	4%
I see no problems	12	There are no courses	4%

Clearly, 'finding the time' is posed as the major difficulty, although this may be used by some as an easy, euphemistic answer. Few were prepared directly to admit a sense of 'inadequacy', but other material suggests that perhaps 20% of people feel that a lack of confidence inhibits photographers' capacity to cope with technical change.

Market forces (manufacturers and customers) tend to 'pressurise' photographers into an acceptance of the continual need for change. The interviewees' range of reactions is summarised in Table 6 (a):

Table 6 "Do you feel a sense of 'pressure' to adopt new technology?"

<b>6(a) Welcome the sense of pressure</b>	<b>49%</b>
<b>Feel no sense of pressure</b>	<b>29%</b>
<b>Feel an unwelcome sense of pressure</b>	<b>22%</b>

When asked if they could say where this sense of 'pressure' came from, the responses were:

<b>6(b) The media in general</b>	<b>50%</b>
<b>'From within self'</b>	<b>48%</b>
<b>Photographic journals</b>	<b>32%</b>
<b>Colleagues at work</b>	<b>28%</b>
<b>Management</b>	<b>18%</b>
<b>Professional associations</b>	<b>12%</b>
<b>Other</b>	<b>14%</b>

The group evidently did not regard Professional bodies or Management as major agencies for change. Some employees felt alienated by a mis-match between their self-generated sense of professional ambition and the employer's seeming lack of interest in New Technology.

It is generally accepted that views on such concepts as New Technology are highly resistant to change. Breakwell (Ref.2) has reported, from a study of under-graduates in all disciplines, that their attitudes to technology are 'enmeshed in a broader system of socio-economic beliefs' and are largely determined before they go to college. It would be interesting to know whether photographic colleges feel that they exert any significant influence in this respect.

(Ref.2: G.M. Breakwell, C.Fife-Schaw and T.Lee 'Survey of student attitudes to technology' Science and Public Policy. Dec. 1985, pp. 337-340)

## Motivation

A group of 'very interested' interviewees were asked if they could say what was at the root of their interest. The responses can be categorised as follows:

### 50% Competitiveness e.g.:

- 'To avoid getting left behind'**
- 'To keep up with others'**
- 'To help career opportunities'**

### 19% Improved circumstances e.g.

- Personal satisfaction**
- More creative opportunities**
- Curiosity**

### 31% Psychological needs e.g.:

- 'Makes life easier'**
- 'Economic benefit'**

Many respondents saw New Technology in terms of a power struggle between themselves and other groups (amateurs, colleagues etc). The competitive element was well summed up by the person who felt that: "... new technology is something you do unto others before they work out how to do it to you"

In motivational terms, the responses of this group give echoes of Maslow's ideas of 'human needs' (Safety, Security, Belongingness, Esteem, Self-actualisation). Without necessarily following the hierarchical structure of this theory, the analysis also identified four factors that affect attitudes to New Technology:

- (1) concern about economic factors, including job prospects
- (2) issues of relative status — lost or gained
- (3) effects upon the 'creative' satisfaction of work
- (4) confidence in the continued ability to learn new things

Expression in these terms may help educationalists to identify 'vulnerable groups' and, perhaps, to see ways in which they can equip the profession to accept technical change. For employers, it suggests areas of staff development as a complement to capital investment.

## Training priorities

The pre-pilot work established 17 items of frequent training interest, which interviewees were asked to rate as:

- (1) a priority matter
- (2) a useful item
- (3) unlikely to be relevant.

Table 7 compares the 'priority' items for practitioners and students. It is evident that 'new technology' by no means leads the list. Many of the most popular topics involve 'traditional' management or photographic skills: Lighting technique and Personal communication are ranked highest by both groups.▶



Students are more likely to rate items at the 'priority' level. Their markedly higher rating of Marketing, Visual literacy and Media studies may reflect inter-generational shifts in college course content.

Table 7 Perceived training priorities

	Practitioners	Students
<b>Lighting technique</b>	<b>41%</b>	<b>94% (1)</b>
<b>Personal communication</b>	<b>34</b>	<b>83 (2)</b>
<b>Financial management</b>	<b>33</b>	<b>39</b>
<b>Video production</b>	<b>*31</b>	<b>33</b>
<b>Computer awareness</b>	<b>*28</b>	<b>39</b>
<b>Digital image processing</b>	<b>*26</b>	<b>28</b>
<b>Marketing</b>	<b>23</b>	<b>67 (3)</b>
<b>Computer graphics</b>	<b>*23</b>	<b>44 (5=)</b>
<b>Computers for business</b>	<b>*21</b>	<b>28</b>
<b>Management of change</b>	<b>20</b>	<b>6</b>
<b>Visual literacy</b>	<b>19</b>	<b>44 (5=)</b>
<b>Computerised process control</b>	<b>*18</b>	<b>28</b>
<b>Hard-copy print-out systems</b>	<b>*17</b>	<b>11</b>
<b>Electronic publishing</b>	<b>*16</b>	<b>22</b>
<b>Media studies</b>	<b>10</b>	<b>61 (4)</b>
<b>Basic electronics</b>	<b>*7</b>	<b>6</b>
<b>Computer programming</b>	<b>*5</b>	<b>17</b>

\* denotes a topic that would commonly be regarded as 'new technology'

## Conclusions

One of the project's aims was to identify people who feel particular concern about the implications of technical change. We are not dealing here with absolutes, but with groups showing relatively widespread feelings of pessimism and a lack of positive strategy:

- those beyond the age of 30-35 who are in 'junior' positions
- those in the small-business sector
- those without a base of technical education

The list presents no real surprises — and the Tables show that there are many exceptions to any 'rule'. However, it is hoped that the figures in this paper give a quantitative dimension which may support further discussion.

It is suggested that photographers' concerns can be addressed in terms of factors such as economics, esteem, creativity and capability. The fact that the most vulnerable groups tend to lie outside the remit of the formal 'educational establishment' is something for policy-makers to address at national level. ■

DIARY DATE ...

DIARY DATE ...

**DIARY DATE ...**

DIARY DATE ...

**PEG SPRING  
CONFERENCE**

**SATURDAY MAY 19th**

**AT**

**KODAK MARKETING  
EDUCATION CENTRE  
HEMEL HEMPSTEAD**

The PEG Spring Conference is being hosted once again by Kodak Ltd at the Hemel Hempstead Marketing Education Centre. With the exception of a small booking fee the day will be free to PEG members — Thanks again Kodak.

In the meantime please send your suggestions for the programme.

**BIPP Education Conference.** Again in the Spring. Mark Berry and Derek Stirling will have details.

DIARY DATE ...

DIARY DATE ...

**DIARY DATE ...**

DIARY DATE ...

Hopefully most members of the PEG will have at least heard of the British Institute of Professional Photography (BIPP) and for certain some are already members, especially those in tertiary education.

The BIPP exists to further the interests of professional photography in all its forms and its use in allied professions. In particular it concerns itself with education in photography and imaging and the award of Distinctions (usually regarded as 'qualifications') to demonstrably able persons in the categories of Licentiate, Associate and Fellow.

These distinctions are awarded by various recognised means such as by achieving success in Professional Qualifying Examinations (PQE) or by the submission of 'evidence' such as photographs, movie films or videos and by thesis. The whole process of assessment and adjudication is undertaken by a Standing Committee called the Admissions and Qualifications Board that also has links with the Education and Training Committee. The whole assessment process involves some 70 Fellows of the BIPP and invited specialists who meet in the Spring of each year. Because of the wide-ranging nature of imaging systems and their applications the Board is subdivided into seven Sectors with responsibilities covering the major areas of practice. For example, Sector 1 covers General Practice while Sector 7 deals with Education, Technical Writing and the History of Photography.

At an A&Q Board meeting in January of this year involving the Chairmen and Deputy Chairmen of these Sectors, among other matters the rapidly changing nature of photographic and electronic imaging was discussed in some depth. This was then related to the routine activities and altering job and career activities of existing and potential members of the BIPP. In a realistic approach to broaden significantly the membership base it was agreed in principle that the more peripheral coverage of the BIPP should be re-activated and positive encouragement given to potential new members. Perhaps the significant phrase that was used to cover such recruitment was that relating to people who are 'professional in photography' as distinct from 'professional photographers'. The world 'photography' is used for convenience to cover all related imaging activities such as film, video, slide-tape, computer generated or electronic systems.

This constructive move is of considerable significance to PEG members, especially those concerned with primary, secondary, continuing and further education in the topic of photography be it GCSE or A level or even Adult Education and C&G 9231 courses. For it

means that such teachers (especially with appropriate teaching qualifications) who are legitimately professional in the teaching of photography as a significant or major part of their employment may apply for Corporate Membership of the BIPP. Even better, given that they can also satisfy age and professional service requirements, such members can also apply for consideration as Associate member with potentially Fellowship to follow. Note that there is no Licentiate grade in Education as this is reserved for submission of photographs alone for assessment and not for the documentary evidence that is more common as evidence in the Education category.

Such Associateship applications would be to Sector 7, and a brief summary of the specific requirements are appended. Please note especially that this Sector also caters for people who are professional in Technical Writing or the History of Photography and could cover journalists and Museum workers. This article gives due warning and plenty of time for the thought processes, preparation and presentation of a worthy application for next year.

Unlike most of the other Sectors, there is generally no need for submission of your OWN photography in a formal manner nor is there even a standard mode of submission of 'evidence'. The evidence sought in general is that of effective communication, an adequate technical knowledge of practical skills and the proof in the form of results obtained from pupils and students.

As well as classroom teachers, technicians in related areas are encouraged to apply as are people working in publishing categories producing teaching materials for photography. The full implications, responsibilities and advantages of Corporate Membership of the BIPP are explained in detail in literature available on application to the Membership Secretary at BIPP headquarters at 2, Amwell End, Ware, Herts. Also available is a 'Guide for Candidates' detailing the requirements for distinctions and qualifications.

Finally, in my capacity as Chairman of the Panel of Fellows in Sector 7 who will assess any applications, I would like to add a personal note of encouragement. It is perfectly legitimate to seek advice concerning the nature, scope and presentation of your future submission from a Panel member, naturally without any guarantee of subsequent success! Consequently I am willing to correspond or meet with PEG members and others who are considering an application and hopefully save their valuable time, channel their efforts and reduce their costs. Given sufficient demand, perhaps even a workshop could be arranged at a suitable venue. ▶

I can be contacted initially by letter at the Faculty of Communication, Polytechnic of Central London, 18-22 Riding House Street, London W1P 7PD, telephone 01-486 5811 extension 6520. Please do bear in mind that I am a working teacher and I do not have unlimited resources of time or funds to devote a lot of time for tutorials and counselling with each individual. Please in any case address your initial enquiries about application to BIPP HQ.

This expansionist attitude of a formerly rather conservative even moribund Institute can only be seen as a significant move for improvement in the recognition of the good work done by you all in classroom, darkroom and library. Corporate membership of the principal professional organisation for photography can be useful evidence of staff development to an employer in matters of appraisal or promotion. Apply now and be recognised!  
Sidney Ray  
(Chairman, Sector 7, BIPP A&Q Board)

**APPENDIX: Extract from 'A GUIDE FOR CANDIDATES'**

SECTOR 7: Education; Technical Writing; History of Photography  
Candidates may apply in the following Educational categories with the differing requirements suggested.

7.1 as an EDUCATOR in the broad areas of Photography, Film, Video and Electronic Imaging, supplying evidence in both written and visual form. This may include contributions to specific courses and curricula, the design, implementation and evaluation of teaching packages, student work and relevant publications.

7.2 As a RESEARCHER in Photographic Education, evidence is required in the form of a thesis and/or publications.

7.3 As a PRODUCER of Photography and visual material for Education in the broadest terms, including PHOTOGRAPHIC TECHNICIANS in Further and Higher Education, twenty examples of work are required presented in a manner suited to the subject matter. These examples of practice must be accompanied by suitable documentation identifying their educational requirements, production logistics and a critical analysis of their effectiveness in use.

7.4 Submissions from candidates in TECHNICAL WRITING must supply suitable examples which demonstrate their skills in communication and their depth of technical knowledge appropriate to general and/or specific areas of Photographic and Imaging systems.

Evidence may be in a variety of printed forms including published material in books, journals and magazines or that for more limited distribution such as in-house publications and reports. (The possible confidential nature of such material will be respected).

Additionally, identifiable roles may be considered such as those of an EDITOR or in printing production including desk-top publication.

7.5 Submissions from candidates in the HISTORY OF PHOTOGRAPHY and other Imaging Systems may submit evidence in the form of a suitable thesis and/or other publications, including broadcast sound or video programmes.

In the special case of development of a teaching programme or course in such History, the requirements of Section 7.1 above then apply.

7.6 Candidates who wish to submit a thesis or other documentation in this Sector should refer to the appropriate section (in the Guide) for specific advice concerning prior notice of intentions. ■





On 23rd February a small group of enthusiastic PEG members, including Frank Hawkins who had taken great trouble to arrange the visit, were welcomed at the optical works of Rank Taylor Hobson in Stoughton Street, Leicester. The promise and intention was that of seeing the complete processes whereby a photographic lens was manufactured.

The party of seven were met by Roland Little, the Product Support Manager and Nick Steel, The Chief Technical Support Engineer who answered all questions freely and in detail during the three and a half hour visit for they were soon aware that the PEG members were keen to probe and query. We could not have had better guides for it became obvious that they had spent many years learning the entire lens making process from first principles and plenty of bench time.

Initially we met in the Boardroom of the elderly factory which was about to be vacated in some two months time for purpose built premises nearby. The company, originally Taylor, Taylor and Hobson first set up in business in Leicester in that building in 1886 and had celebrated their centenary two years before. It did seem very appropriate that in 1989 the 150th anniversary of the birth of photography that our visit should take place. The building was looking a little seedy and run-down given its future prospects but there was no doubt as to the world class quality of the products produced from such Gothic tech surroundings. It was also emphasised that there never was any temptation to move away from Leicester because of the pool of skilled labour available and the strong family tradition of working for RTH. Indeed services of 50 years were still done and 30 years was rather commonplace. Bearing in mind that it took a minimum of 5 years to train someone to become an accomplished lens grinder and polisher for starters this is not surprising. In the Boardroom a small display of the company's products have been laid out, including zoom lenses, prism assemblies, cine and process lenses.

All the PEG group found old friends among this collection and Apotals, Entals and Varotals were passed around with reminiscing. Then followed the tour of the workshops. Following the design process the appropriate sizes of pressed lens element blanks are ordered from elsewhere, usually Schott in West Germany. These are then fixed into revolving grinding tools are rough polished to shape with abrasive followed by fine polishing. The actual spherical shape of the polished surface is checked against a master surface using the principle of interference fringes in Zygo

interferometer to show the goodness of fit. Following thorough cleaning the lens elements are then carefully centred to a principal optical axis and the rim blackened to reduce flare inside the assembled lens. We got a tip on the polishing and cleaning of the surface of a lens — in a word — DONT!. A few dust particles are preferable to the thin layer of scum left by most cleaning techniques.

We did not see the cementing room for the production of doublet groups of elements or the surface coating plant where the anti-reflection layers were applied, for these were 'clean areas'. We did see the manufacture of aspheric surfaces involving the complex action of a diamond tipped cutting tool and special polishing. At every stage we saw production machinery which had been designed and built specially by RTH themselves as they could not purchase suitable equipment, and now they had found a lucrative and growing market for the manufacture and sale of their testing and metrology equipment.

The final stage was assembly of the complete lens from all the mechanical and optical components. Only very costly zoom lenses for cine and TV are currently in production and each of these is assembled by hand by a single craftsman who may take up to two weeks for this including exhaustive testing to standards at each stage. There can be few other photographic products that are still hand made in this way.

The testing procedures involved much specialist machinery and matters such as distance scales and the T-stop settings were marked out. Then accuracy of tracking of the optical axis during zooming and lack of focus drift followed by evaluation of the modulation transfer function to determine image contrast and resolving power.

Mindful of the need to simulate practical use, another test involved attachment of the lens to a high power projector and the visual assessment on a giant screen of a detailed test target plate in the focal plane of the lens. The change of distortion and image size as well as the appearance of lateral colour and other residual aberrations were delightful to people who had perhaps lectured much about them but rarely could have been able to demonstrate them so convincingly!

We were left with a very favourable impression of a small area of photographic technology in which Britain still has a world lead and sets standards for others to achieve. It seems not to bother RTH about their low profile but presumably their full order books and the near impossibility of speeding up production and stockpiling while maintaining their quality standards does not enthuse them ►



about advertising. The potential customers already know about their products and do not need editorial reviews it seems.

The visit was judged a great success and those members who did not attend were deemed to have missed out enormously. Surely more than seven people could have found time to attend, after all photographic lenses are items we all use and talk about in detail to pupils and students. Some first hand information can always be useful and accurate. While the small numbers on the visit meant excellent opportunities to see, touch and question, it is a little unfair to the host organisation and to the organiser of the visit. You all missed a good one!

Sidney Ray ■

## Fuji support for the PEG Special Needs Project

At the time of writing (November) I am pleased to say that we have been promised a Christmas present from Fuji in the form of 200 Quick Snap Flash cameras. FWH. ■

## Vocational Standards Council for the Photography and Photographic Processing Industry

Work is well advanced in the setting of standards for the Laboratory sector of the Industry. A second project, also jointly funded by the Training Agency and the industry, to set standards for photographers was approved to start on the 1st of December. The scientific and technical sectors have been selected for the first phase of the project. ■

### Hearing Impaired Centre

The Hasselblad Foundation funds have been used to make a small grant (£250) to Langley Wood School, Slough for equipment and materials for the Photographic section servicing the Hearing Impaired Unit.

### — more from Frank Blackwell's collection

●  
*'Julia Margaret Cameron took pictures on a wet plate camera'*

●  
*'This photograph was taken in 1861, in the Crimean War, by Sting Ray'*

●  
*'Bas-relief gives the effect as seen by a drunkard, at night'*

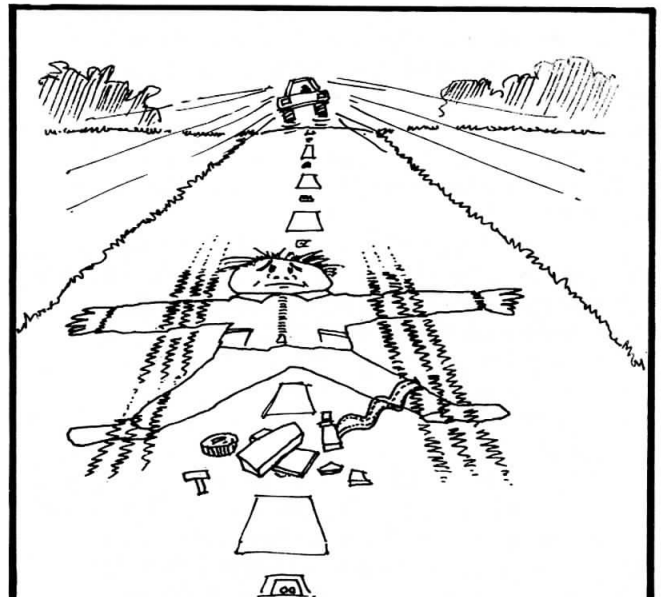
●  
*'A good way to illustrate movement is to get a low viewpoint by lying in the road as a fast moving car travels towards you'*

●  
*'A soft focus lens can be used to flatten a female face without showing the blemishes'*

●  
*'Eastmans films were sold like hot cakes'*

●  
*'Grain is produced when you blow up a negative'*

●  
*'... all I can tell you about a stop bath is that it has a terrible smell' ■*



Photographic education has never been short of innovators, doing things another way is a characteristic of our business. Changes in the pattern of teaching and learning have come about for many reasons. Back in the 60s many schools found the professional schemes and external examinations then available educationally limiting and reacted by developing college diploma courses which allowed for a greater measure of freedom in course design and increased scope for the personal development of their students. In schools teachers were looking at the opportunities offered by the new CSE and GCE schemes.

A desire to improve the quality of the learning experience is one reason for change which most of us would agree as being desirable; meeting the needs of industry is another which is currently exercising the minds of staff in the vocational sector. Changes in public examination schemes have also stimulated reviews of aims, contents and teaching method. A far less acceptable cause has been brought about by the need to cope with reduced levels of resources.

One of the stronger of the recent stimuli for curricular innovation and new patterns of provision has been directed at meeting the needs of new client groups. The introduction of schemes such as TVEI and CPVE has created new challenges in schools. There has been a re-awakening of interest in the short specialised course for industry. The design of provision to support specialisms such as photo-retail is an important aspect of this, as is the development of more flexible systems for delivering and accrediting courses. Europe, 1992 and all that, is also beginning to influence thinking.

It is now possible to see college staff, often with the help of Training Agency funding, undertaking market research to identify areas of unmet need.

In the field of adult education the growing demand for leisure courses has led to the introduction of a range of flexible course provision.

The availability within education of new technology and IT systems has provided the opportunity for staff to make a fresh approach to teaching and learning as well as the reworking of some old ideas.

This article attempts to review some of these developments.

## VIDEOCONFERENCES

Our front cover reminds us of the immense potential of new technology and its potential to change existing patterns of teaching and learning. The Eastman Kodak initiative of using satellites to link colleges right across the United States for live demonstrations and phone-ins with master photographers, now extends beyond the USA to centres of photographic education in Europe.

At the present time, not all establishments on this side of the Atlantic have the required down-link equipment but the participation rate is bound to increase as more and more schools realise the educational value of what is on offer.

Recent Videoconferences featured the 'Social Documentarian'. Mary Ellen Mark. Mary's photo essay 'Mother Teresa in Calcutta' for LIFE Magazine won the Robert F Kennedy Journalism First Prize in 1980. She gained another Kennedy First Prize for her LIFE picture story 'Camp Good Times' in 1985. Werner Deisenroth, one of the foremost car photographers in Europe also featured in this two hour broadcast.

Joyce Tenneson, fine art, fashion and beauty photographer whose work has been used regularly in Vogue, Taxi and New York magazine shared the April broadcast with Professor Harald Mante of the School of Photography in Dortmund, West Germany. Kodak encourages schools to tape these broadcasts, subject to their being used for education only.

To help schools in Europe, Kodak has appointed a European Videoconference Co-ordinator. So if you want advice or information about future programmes contact Mr Chris Highmore at the European office of Eastman Kodak in Hammersmith London (01 748 7979).

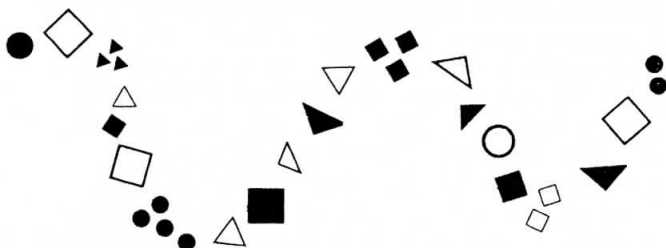
## OTHER FORMS OF DISTANCE AND FLEXIBLE LEARNING

Outside the major centres of population it has always been difficult to find suitable courses for trainees who work in studios and laboratories. Travelling distances are often too great or, for those who have to use public transport, it may be impossible to get home after classes. Even where classes are available, employers are not always willing to grant time off for attendance at college, ►

especially during periods of peak demand. For these students and their employers the vocational correspondence course may provide a convenient alternative. Several new ones are now available.

## **PRESS PHOTOGRAPHY**

A completely new and highly professional course designed to meet the needs of the press photographer has just been launched by Newspaper Training Services, (0629 534 826). This specialist training organisation is headed by former press photographer and lecturer Eddie Bissell. Eddie was formerly in charge of NCTJ press photography courses at Richmond (now Stradbroke) College in Sheffield.



## **PHOTOGRAPHY RETAIL ASSISTANTS**

Since the demise of the Photographic Dealers Association, sales staff have had no specialist qualifications available to them. That is changing following the formation of the Photographic and Video Retailers Association. As mentioned elsewhere, PAVRA plans to offer a national 'In shop' training scheme. The teaching scheme is a mix of correspondence elements, videos and supervised 'in shop' practical work.

## **FLEXIBLE LEARNING for CGLI 747**

is on offer at Longlands College Middlesborough. This innovative scheme stems from the experience of Alastair Smith, a college lecturer who spent a year in the USA on a Fulbright Scholarship. During his stay in Minnesota he visited North East VOTEC where he encountered a system of teaching vocational subjects, including AV, by the use of specially prepared learning guides. On his return he adapted the system to the needs of part-time photography students.

The basic course is structured around 32 guided study units, these provide for practical work and include study references. The facility is available for three sessions a day, two days a week. Students may attend for one or more sessions and are assessed as they reach the end of each unit. Enrolment takes place at any point in the academic year and the time taken to complete is related to the individuals rate of

learning and the time available. The Units may be taken at work or in college. The system is proving to be very popular, suiting the needs of local firms and freelance workers who are not always able to attend on a regular basis. Over 40 photographers are currently registered as students.

## **MODULES FOR 747**

One of the features of the scheme is the opportunity provided to study any of the eleven modules as self contained units of study each complete with a record of achievement. They may be built up into a full award at any time or selected to meet the specific requirements of industry.

## **COLLEGE/INDUSTRY LINKS**

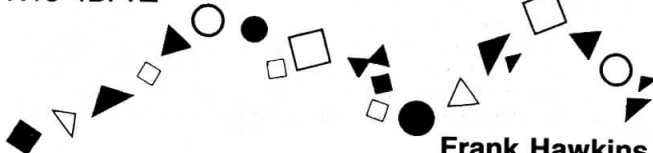
The leading example of a college and industry working together is the setting up within the London College of Printing of The PhotoLab Staff Training Centre. It offers two and three day intensive short courses tailored to meet the needs of industry. Information on the twenty courses currently available can be obtained from:- Fred Dustin PhotoLab Training Manager. London College of Printing, Elephant and Castle. London SE1 6SB.

## **LEISURE COURSES AND SEMI PROFESSIONAL COURSES**

City and Guilds 9231 is now offered in a variety of modes. The standard evening institute or college course is most usual and is available in about 140 centres (CGLI Div 23 for list) The Rapid Results College offers the 9231 course by correspondence. Some short residential adult colleges run weekends courses and The Polytechnic of Central London includes 9231 modules in its summer school programme. The scheme is shortly to be expanded by the addition of another group of modules including, Close-up and Macro photography, Images without lenses, Action and Movement, Photoessay and Theory modules.

The Open College of the Arts is shortly to enrol its second intake of students for their 'Art of Photography' course. OCA, Houndhill, Worsborough, Barnsley S70 6TU.

Courses for freelance photographers are available from the Bureau of Freelance Photographers. The BFP School of Photography, 497 Green Lanes, London N13 4BP. ■



**Frank Hawkins**



## 'GETTING JOBS IN PHOTOGRAPHY'

Is the title of a new careers publication in the Cassell Job Guide series. Written by the Inner London Central Careers Office specialist, Kim Howard, the book is a fact packed 96 pages of objective, potted advice. A good buy at £3.95.

## 'KAMERA UND SCHULE'

The German quarterly magazine for photography in schools has been replaced by a new title 'Medien aktiv Das Magazin für Bild und Kommunikation', the new publication covers Video and Photography in the school.

## APPLIED PHOTOGRAPHIC OPTICS

S. Ray

Focal Press — Butterworth Scientific £60.00

It is difficult to think of any student, lecturer or professional photographer who would not benefit from this book. Its 526 pages arranged in 69 specialised chapters provide a comprehensive treatment of the principles and applications of lenses and optical systems.

The text is organised in three major sections: Optical theory, Lens types and properties and Photographic optical systems. This latter section will be of particular value to medical and research photographers who are required to modify or develop equipment for special purposes.

The author has managed to create a text which can be approached at several levels, most topics are introduced with a description that is crisp, clear and precise, only then does he introduce a theoretical and mathematical treatment. Where a historical perspective is helpful to understanding this is given. Again the frequent reference to actual systems is a boon to those who wish to select equipment for a specific purpose. For those who wish to go deeper, each chapter is fully supported by references.

In gathering together the data and illustrations in the form of tables, graphs and diagrams the author has created an up to date and unequalled source of reference.

## HANDBOOK OF SCIENTIFIC PHOTOGRAPHY (2ND EDITION)

Alfred A Blaker

Focal Press £39.95

This Focal Press publication is the second edition of a work under this title which appeared in 1977 published by W H Freeman (USA). The preface describes the book as "a practical book on the "how-to" aspects of general scientific photography, and can be used as a bench reference and a course text. The aim is said to be "to aid the reader in making high quality scientific illustrations".

From the point of view of the use of the book as a course text it should be noted that the coverage of scientific applications of photography is far less than is suggested by the title. Apart from the limited coverage there is a degree of inconsistency in the treatment, but if used selectively, the book could be of value in teaching the techniques of small object photography.

The sections on, lighting three dimensional subjects, small-object photography, photomicrography and general problems, contain much excellent material based on hard won professional experience. However, other sections are less commendable. The chapter on choice of equipment devotes much space to discussing and illustrating 35mm rangefinder type cameras, an early type of SLR, the Twin lens Reflex and large format press cameras of the front focussing folding baseboard type. It suggests that the latter are "ideal" where one camera must serve a variety of uses (including close-up). The treatment is in no way an objective review of the advantages and disadvantages of different designs and formats and pays little attention to the wide range of 35mm and RF "systems" and large format monorail cameras now available to the research photographer.

For film processing, the recommended method for sheet film is to process up to twelve 4 x 5 negatives in an 8 x 10 inch dish. Later, stress is placed on temperature control for processing B/W films. The limit recommended is "plus or minus one half a degree Fahrenheit. Failure to keep the temperature within close limits during all liquid processing steps, from initial development right through the post wash rinse, introduces the risk of reticulation".

In the section on negative slides (p 254) the author recommends the use of Ektachrome transparency film processed in Kodak C-22 chemicals. C-22 was replaced by the C-41 process in the late 70s! For introducing scales, the reader is recommended to score lines on the negative with a knife!

There is a bibliography which also suffers from incomplete up-dating, only three of the 36 articles listed post date the 1977 edition.

The Handbook is well produced and has excellent line diagrams, unfortunately the original photographic illustrations fall below the "high quality" which the book sets out to demonstrate.

## THE BFP BOOK OF FREELANCE PHOTOGRAPHY

Edited by John Wade

BFP Books £14.95

The book is described by the publisher as "The definitive guide to earning cash with your camera". It has a well targeted readership of the keen and experienced amateur photographer.

It is organised in three main sections:-

Thinking like a freelance

Close-up on markets

Tips from the top

The Market section consists of 26 essays each written by an established specialist freelance photographer. The advice given is sound, there are examples of typical work and tips on what the editor needs. In a treatment of this kind some repetition is inevitable, in some cases it serves to emphasise essential advice. Being a successful freelance calls for expert subject knowledge, precisely written captions and well researched articles. Technical standards must be high. The book provides a useful introduction to freelancing for magazines and the press. It is well produced and copiously illustrated with relevant examples of work. Of interest to students attending adult education classes and full-time students intent on exploring the possibilities of self-employment.

## THE PROFESSIONAL GUIDE TO PHOTO DATA

Richard Platt — Mitchell Beazley £5.95

Given the position of deciding which book to take on a foreign journey or how best to spend £5.95, the working photographer could do no better than opt for Richard Platt's Guide to PHOTO DATA. Published in hardback, the volume is produced in the familiar Mitchell Beazley field guide format; slim, pocketable, printed on lightweight paper and comprehensively indexed. It contains hard to find practical information.

Much of it is presented in the form of easy to read charts, eg., the country by country travel guide, list 90 worldwide destinations with special reference to photographic requirements. Language, time zone, volts and Hz, plug types, jabs, Visa, TV standards, IDD phone dialling codes, processing availability for C41 & E6, camera repair, equipment hire, military and strategic (prohibited subjects), other sensitive subjects. This useful section is completed with advice on the risk to film of airport X-Rays.

Of particular interest to students is the selection on image calculations. The charts show how to key values into a standard pocket calculator in order to work out, hyperfocal distance, near and far points, circles of confusion, image size, finding a field of view, choosing focal length and macro calculations.

The section on sensitive materials gives a mass of data on film types available, batch testing, storage and the restoration of faded colour images. There are tables of film edge numbers (121) and notch codes (58), DX codes are explained together with notes on how to modify the ISO value programmed.

If you want to take photographs from the air there is helpful advice on the use of light aircraft, helicopters, kites and balloons.

Those photographers who need to predict the position of the sun when planning location shoots will be assisted by the unique sunfinder charts which predict the sun's position at any location between the Arctic and Antarctic circles on any day of the year.

In terms of coverage the author admits a bias towards 35 mm and location photography but nevertheless the book is a remarkable collection of useful and authoritative information.

The Guide is rounded off with a five language phrasebook of photographic terms.

## THE FREELANCE PHOTOGRAPHERS MARKET HANDBOOK 1990

Edited by John Tracy and Stewart Gibson — BFP Books £7.95

With the trend among college leavers to opt for self employment as freelance photographers, the revised and extended edition of the Handbook provides an indispensable guide to potential markets in the field of magazines and picture agencies. There are no fewer than 800 specialised entries of which 40 are listed for the first time.

Taking saleable photographs isn't difficult, the difficulty lies in finding the market. The purpose of the Handbook is to provide information about the type of illustrations and articles used by specialised publications, the potential for the freelance, guidance on fees and Editor's tips for potential contributors.

The magazine section lists the publications under 38 interest categories which range from Angling, Aviation, Cycling and motorcycling, to: Sport, Transport, Travel and Women's Interests.

There is a separate section listing 30 Agencies and picture libraries. Another selection deals with card and calendar publishers and their specialised requirements.

The handbook concludes with a listing of photographic services and suppliers. ■