

# Brief History of the

# CANBERRA TECHNICAL COLLEGE

Submitted in Commonwealth Jubilee Year on the occasion of the Annual Presentation of Prizes, in the Albert Hall, on the 19th September, 1951.

Prepared by R. Bruce Brown, Principal

## CANBERRA TECHNICAL COLLEGE

# STAFF - 1951

Principal: R. BRUCE BROWN, B.Ec., A.M.I.I.A. Head Teacher of Building Trades: A. A. JACK, A.S.T.C. (Bldg.)

### FULL-TIME TEACHERS

Accountancy—J. Olsson, A.I.C.A.
Bricklaying—A. Peaston.
Carpentry and Joinery—
C. W. Guthrie
J. W. Livey

J. G. McIntosh
Engineering (Electrical)—
R. Crawford
J. R. Mallesch

Engineering (Mechanical & Automotive)-

T. K. Sinclair T. W. Wilson Housepainting- E. F. Hartman.

Plumbing-R. A. Cole.

Pottery-Mrs. D. Gumley.

Miss N. Ludowici, A.S.T.C. Secretarial-Mrs. N. Hunter.

Mrs. J. Oakes. Women's Handicrafts-

Miss M. Brunner.

Mrs. G. Gilbert Miss I. Marshall.

Mrs. T. White.

### VISITING TEACHERS—PART-TIME

Accountancy-D. G. Dunlop, B. Comm., Dip. Pub. Ad., F.C.I.S., F.F.I:A:,

A.I.C.A., A.F.I.A. L. R. Kentwell, A.A.A.,

A.C.A.A:, A.C.I.S. R. Linford, B.Comm., B.A.

H. A. Reid, B.Ec.

G. Wynn, B.Ec., A.I.C.A. Architecture-

A. N. Baldwinson, A.R.I.B.A., A.R.A.I.A.

B. A. Litchfield, A.S.T.C., A.R.I.B.A., A.R.A.I:A:

G. E. Duncan.

H. Gilliland. J. T. Gray. L. A. Marshall.

Miss E. Oates.

Automotive Mechanics-J. Macgregor.

Boiler Attendants-P. McConaghy. Diesel Operation-J. Heaton.

Dressmaking-Mrs. V. Gibson. Horticulture-

G. H. Fetherston.

Housepainting-A. Watt. Millinery-Mrs. H. Shakespeare.

Plastering-St. C. Low.

Plumbing—M. McNally. Printing—S. J. Bradbury. S. Napier.

Sheep and Wool-C. S. Russell. Showcard and Ticketwriting-

H. E. Smith.

Signwriting—D. Evans. Supervision—H. Torr.

Typewriting-Miss H. Holliday.

## ADMINISTRATIVE AND GENERAL STAFF

Registrar-P. McIntosh. Secretary—Miss S. Stuckey. Clerk (C.R.T.S.)-C. Ham.

Carpenter-D. Stirling. Storeman-T. Mcarthy. Labourer-N. Werpeta.

# Canberra Technical College

# Its foundation and history to the Commonwealth Jubilee Year, 1951.

It is thought to be appropriate that in this, the Commonwealth Jubilee Year and at its own Silver Anniversary, a brief history of the Canberra Technical College should be placed on record.

Although the College was founded but a quarter of a century ago. its recorded history may well prove useful in the framing of future policy, and convenient as a reference for subsequent statements regarding the development of this Canberra Institution as it moves towards its own Jubilee and beyond . . .

### Summary

The history outlined below reveals that the College has been transformed over the past twenty-five years from a somewhat precarious part-time activity providing a limited range of supplementary Trades Courses to a permanent establishment providing services in the educational field for a large number of Canberra citizens and organisations, in a wide variety of educational courses.

The College has proved over the years to be flexible in its organisation and resources, in meeting demands to solve emergency

educational problems.

Although it received its guarantee of permanency from the provisions of the Apprecticeship Ordinance (1936) it has assisted in the alleviation of the problem of youth unemployment during the depression; the training of Technical personnel for the R.A.A.F. and recruits for the R.A.A.F. during World War II; the training of male and female workers for the production of war munitions; the re-establishment of Ex-service personnel thus contributing to the resources of the local economy in the building of this, the National Capital.

The College has become a utilitarian institution on the one hand, and there is no doubt that in any emergency conditions which may arise in the future, it will address itself with vigour to the training problems that may be involved, and for which its resources

are appropriate.

On the other hand, it has become a centre of cultural activity. of which the individual citizens of Canberra might well be proud.

### The Planning and Foundation Years, 1925-1932

From the earliest days of the Federal Capital Commission, the need for technical education was recognised as part of the problem of providing a comprehensive range of educational facilities for the

existing and future residents of the National Capital.

On October 31, 1925, the then Secretary of the Commission (Mr. C. S. Daley) reported to the Commission on "the proposal to make provision for junior technical education in Canberra." This report foreshadowed the introduction of a Junior Technical Course as one of the alternative Courses to be offered by the recently established secondary school at Telopea Park. It was anticipated that the

Junior Technical Course would lead pupils generally towards trade apprenticeships, whilst for lads already of apprenticeship age the immediate establishment of "Trade Continuation Classes" was en-

visaged.

At the invitation of the Commission, Mr. James Nangle, the then Superintendent of Technical Education in N.S.W. visited Canberra in November, 1925 and in his report recommended the establishment, at Telopea Park School of —

(a) A Junior Technical (pre-vocational) Section, and

(b) Trades Courses "designed to be supplementary to the experience gained by the apprentices and journeymen in the workshops and factories."

The Trades Courses suggested for immediate establishment were Carpentry and Joinery, Plumbing and Sheet Metal, Fitting and Machining, and Electrical Mechanics. He submitted that the accommodation and equipment required would be common to the Trades Classes (evening) and the Junior Technical normal day school classes. In support of these recommendations, Mr. Nangle

commented:-

"At the moment the population at Canberra is not very large, but it will rapidly increase, and in only a little while may reach up to about 20,000 people. Apart, however, from the question of numbers, the population at Canberra will be quite unusual in character. At present, there are already a very large number of skilled artisans engaged in the construction of the Capital and this number will be maintained for quite a number of years yet. The number of civil servants removed to Canberra from the other capital cities will soon be comparatively large. In addition to this, there is evidence that quite a number of people will select Canberra as a place in which to live on account of its beautiful climate and scenery. All these things together make it clear that the people of Canberra will be of the type placing high value on education. Indeed, already there has been a demand. It seems therefore that almost every kind of school will have to be established there. The numbers attending may make each school comparatively expensive, but the question of expense should not be allowed to have undue weight, because Canberra must be the focus of the intellectual life of the Commonwealth."

In 1926, some consideration was given to the establishment of the Trades Courses in a building near the Kingston Workshops, indicating that the idea of a separate institution had germinated.

At this time (August, 1926) the Federal Capital Commission prepared a preliminary scheme for Vocational Education. This scheme embodied the principle "that as an indispensable adjunct to a scheme of apprenticeship there should be provided preliminary training in a Junior Technical School, and Trades Classes should be conducted concurrently with apprenticeship for further instruction in the practical and theoretical aspects of the trades being followed by the apprentice."

In June, 1927, Mr. Nangle again visited Canberra "to advise on details of the equipment and furniture for the Junior Technical and Trades School at the Telopea Park School." Mr. Nangle reported that with the accommodation to be made available "provision can be made for the establishment of the following courses of supplementary trade instruction for a total of about 150 students in —

Fitting and Machining.
Plumbing and Sheet Metal Work.
Carpentry and Joinery.
Electrical Fitting.

"In addition there should also be established evening courses in Book-keeping and Accountancy, Shorthand, Dressmaking and Millinery, Cooking and Household Management. It is proposed that the courses of instruction given examinations conducted and certificates issued should be those under the direction of the N.S.W. Technical Education Branch . . . The staff should be appointed through the Public Service Board in this State (N.S.W.) and it is hoped that the teachers will be considered as on the staff of the Department of Technical Education, subject to its rules and regulations and enjoying the privileges of the Department."

Advice was also given by Mr. Nangle and his officers in regard to the organisation, staffing, accommodation and equipment required to conduct the classes. The estimated cost to equip a wing of the Telopea Park School for the Junior Technical and Trades Classes was £5,110, and the annual estimated running costs for the Trades

Classes was £1,300.

On 4th November, 1927, an advertisement appeared in "The Canberra Times" inviting application for the positions of part-time teachers and a part-time Sub-Registrar, and on 9th November, 1927, a Circular was issued through the Commonwealth Department Offices outlining the proposal to establish in 1928, "Evening Continuation Classes and a Trades School at Telopea Park School" and inviting enrolments in the following classes:-

**Evening Continuation Classes** Shorthand Typewriting Book-keeping and Business Principles English Mathematics

Evening Trades School Fitting and Machining Plumbing and Sheet Metal Work Electrical Fitting Carpentry and Joinery Dressmaking and Millinery Domestic Science Book-keeping and Accountancy

At the beginning of the 1928 school year, the Telopea Park School offered to its new secondary pupils a Junior Technical Course comprising English, History Mathematics, Science, Geography and Manual Work.

The first Trades Classes were commenced in May, 1928, in the following subjects and in charge of the part-time teachers indicated-

Fitting and Machining ... Plumbing and Sheet Metal Work Mr. J. McKinnon 

ponsible for the administrative work involved.

A "Motor Class for Owner-Drivers" started in August, 1928, with Mr. J. Macgregor as part-time teacher. Mr. Macgregor is still (1951) the College part-time teacher of Motor Maintenance. Enrolments in the Trades Classes in 1929 and 1930 were as

follows:

lows.—		
	1929	1930
Fitting and Machining	8	10
Plumbing and Sheet Metal Work	12	7
Dressmaking	11	6/Closed in October)
Cookery	6	3
Carpentry and Joinery	5	8
Motor Maintenance	10	20
Electrical Fitting	7	9
Trade Drawing	16	19
Trade Calculations	20	25
	_	9 (Closed in July)
Totals	95	116

As no apprenticeship system was yet operative in the F.C.T., no occupational qualifications for enrolment in the classes obtained.

Is is of interest to note that, in the 1929 Sydney Technical College examinations, sixteen candidates presented themselves, all were successful and these included J. McIntosh, a present (1951)

full-time teacher of Carpentry and Joinery.

Available records do not include enrolment figures for the year 1931, but reveal that the only classes continued were in Fitting and Machining, Plumbing and Sheet Metal Work, Motor Maintenance (including a class for ladies), Trades Drawing and Calculations and, in 1932, the class in Dressmaking was revived.

### The Depression Period, 1932-1937

It is clear, however, that, in common with many other community activities, the effects of the depression were being experienced and the existence of the Trades School was in jeopardy. further factor threatening, temporarily, its progress was the opposition by the Trades and Labour Council, based on the principle of "no vocational training without apprenticeship."

Faced with the problem of unemployed youths in Canberra (and throughout Australia) the Commonwealth Government appointed Vocational Training Committees in 1931.

In March, 1932, the Canberra Vocational Training Committee (comprising Messrs. H. R. Waterman (Chairman), J. F. Muir, A. E. Helson, P. McNamara, H. P. Moss, J. Fleming, J. Goodwin, H. Filshie and H. S. Temby (Secretary), recommended (inter alia) the continuation of the evening Trades Classes, an immediate substantial reduction of fees (approx. 50 per cent.) as an inducement to employed youths to attend, the early promulgation of an Apprenticeship Ordinance and the establishment of Diploma Courses in Architecture and Engineering (Demand for Diploma Courses has not so far (1951) justified their establishment).

At the beginning of April, 1933, the Trades Classes in Fitting and Machining, Plumbing and Sheet Metal Work, Trades Drawing

and Motor Maintenance were moved to Kingston.

The move was reported on March 25, 1933, by "The Canberra Times" as follows:-

"Consequent on the necessity for providing extra accommodation at Telopea Park School the Plumbing and Sheet Metal and Machinery and Fitting Classes of the Canberra Trades School, which were formerly conducted at Telopea Park, have been moved to premises at the Kingston Workshops. The Trades Classes in these subjects will be re-opened at Kingston next week."

The Motor Maintenance Class continued also and day-time classes in Sheep and Wool were established at Kingston.

The classes offered in 1934 and 1935 were similar to those conducted in 1933 (although the Motor Maintenance class found itself "in the doldrums" during 1934). Meanwhile the Evening Continuation Classes continued at Telopea Park, classes in English, French, Latin, Mathematics, History, Geography, Shorthand, Typewriting, Business Principles and Practice being offered in 1935.

In March 1936 a Vocational Training Scheme involving full daytime attendance for unemployed youth was established with full-

time instructors for each of the following Trades Classes:-\*\*\*\*\* \*\*\*\*\*\*\*\*

Motor Mechanics			G. Kilmartin
Bricklaying		Mr	. A. Mabbott
Plumbing	***** ***** ****	Mr.	A. E. Helson
Carpentry		Mr. (	C. Dowthwaite

Comment upon the newly established scheme by the then Minister for the Interior was reported by the "Sydney Morning Herald" on April 30, 1936, as follows:—

### VOCATIONAL TRAINING

"The Minister for the Interior (Mr. Paterson), after visiting the newly established vocational training classes in motor mechanics, plumbing, and sheetmetal work bricklaying, and carpentering at Kingston, said to-day, that although the present enrolment of 27 was not large, he was confident that when the opportunities afforded became better known, the vacancies in the classes would soon be filled.

"An Apprenticeship Board was to be established in the Federal Capital Territory shortly, continued Mr. Paterson. It would take steps to declare apprenticeship trades, to fix the number of apprentices to be taken in each trade, and would consider applications for apprenticeship. The board would act upon its own responsibility, but he had no doubt it would take into consideration the work accomplished by boys in the vocational training classes.

"The school, Mr. Paterson concluded, provided a practical and adequate means of implementing the decision of the Commonwealth to assist as far as possible in the solution of the local unemployment problem."

Students enrolled were able to obtain leave from classes to undertake periodic relief work as it offered. Accommodation at Kingston was augmented by the transfer of academic buildings from Duntroon when the Royal Military College was temporarily moved to Sydney.

### Early Years of Apprenticeship, 1937-1940.

The Vocational Training Scheme in its relation to the Apprenticeship system (established under the Apprenticeship Ordinance dated August, 1936) is summarised in the following Departmental statement, dated January 29, 1937:—

### VOCATIONAL TRAINING AND APPRENTICESHIP

With a view to assisting as far as possible in the solution of the local problem of unemployment of youth, which, of course is not peculiar to the Federal Capital Territory, the Minister for the Interior (the Honourable T. Paterson, M.P.) late in 1935 caused an investigation to be made as to the practicability of establishing vocational training classes along the lines adopted in the State of New South Wales.

The Department of the Interior had already at its disposal accommodation and equipment for classes in Motor Mechanics and Plumbing, which were utilised in connection with the Evening Trade Classes, but it was apparanet that the provision of additional accommodation, equipment, and instruction for certain classes—even though dismantled building material from Duntroon could be utilised—would entail substantial expenditure.

An invitation to Canberra youths to apply for participation in a scheme for free vocational training resulted in a total application for enrolment of 43. This number was reduced to 27 by the time school opened, but numbers consolidated during 1936, at the end of which year the total enrolment had increased to 45.

The housing equipment, and operation of full day classes in Motor Mechanics, Plumbing, Carpentry, and Bricklaying was estimated to cost £2,800 for a year. This outlay on a per capita basis would cost £66 per head for the enrolment achieved. It

was, however, regarded as an outlay which could be reasonably spread over at least three years, reducing per capita cost to £33 per head.

It could not be definitely indicated what the demand for training would be in subsequent years, but it was concluded that the scheme and the projected establishment of apprenticeship might have a stimulating effect on boys leaving school, and permit others who were not ready for apprenticeship to obtain preliminary training such as would be afforded by the vocational training scheme.

Apart from the foregoing considerations, the question of the introduction of a vocational training scheme was affected by the definite intention of the Government to introduce an apprenticeship scheme in the Territory. Such a scheme, of course, would entail provision for practical and theoretical tuition in trades, and accommodation, equipment, and staffing would be necessary. Thus the financial outlay was perceived to achieve the dual objective of teaching youths who would otherwise be idle the elements of a trade, and at the same time, lay the foundation of their preliminary equipment as apprentices.

In these circumstances the Government decided to proceed with the establishment of the scheme, and the school opened early in April, 1936. Qualified Instructors were obtained locally, the curriculum of the Sydney Technical College was adopted, and by the end of the year, 44 students had negotiated the first stage of the work they would need to do in the first stages of apprenticeship.

Most of these youths were old enough to participate, pursuant to policy, in the allocation of relief work. Arrangements were made for their periodical release from their studies to perform their share of relief work, the wages from which were of material assistance in their maintenance at home. This arrangement effectively disposed of what would have been a serious problem — the rention of the interest of the students and their parents in Technical education, notwithstanding the withdrawal of an opportunity to earn wages.

It is reported that the students are, without exception keenly interested in their work, and have expressed the hope that they will be given an opportunity of returning to the work of the

course pursued this year.

Reference is made earlier in this statement to the intention of the Government to introduce an apprenticeship scheme. The first step to implement this intention was the introduction of an Apprenticeship Ordinance in 1936. This Ordinance provided for the appointment of an Apprenticeship Board of five members, a Chairman appointed by the Minister, a representative of the Commonwealth as an employer also appointed by the Minister), a representative of private employers, and two representatives of employees. The Ordinance clothed this Board with power to develop a scheme and lay down fundamentals in the policy, including the fixation of rates of wages and conditions, provision for technical training, the registration of employers of apprentices, as well at apprentices, indentures, and the prohibition of the engagement of minors in apprenticeship trades (to be formally declared as such by the Board) after a date to be fixed, excepting as apprentices.

The Board has met regularly and frequently since early August, 1936, and examined in detail Apprenticeship Legislation

and practice, not only in the Commonwealth of Australia, but overseas where Technical education and apprenticeship are highly developed, and co-related these factors with local requirements. The Board has, on this basis, devised a comprehensive code of Regulations to safeguard and assist, not only an apprentice, but an employer in the objective of the legislation, namely, the production of fully qualified and competent tradesmen in a wide range of skilled occupations. Emphasis is laid in the code upon a substantial preliminary education for apprentices, comprising not only progress to the Qualifying Certificate standard, but two years' Secondary education (including subjects needed to serve trade requirements) and a year's training in the vocational training school. This code is in draft form and is receiving final consideration with a view to promulgation.

A primary difficulty which has been experienced in industry, especially in late years, has been the impracticability of a four or five years' indenture. Employers have been unable to assume the obligation of providing regular employment for so long a period in advance. This difficulty has been overcome in the Apprenticeship Ordinance, 1936, by the inclusion of provision for trainee apprenticeship. This scheme enables an apprentice to serve without indentures in the services of a succession of employers — as trade fluctuations may dictate. The scheme, of course, contains safeguards to approve of documental transfers with continuity of technical training throughout apprenticeship.

The Apprenticeship Ordinance provides for the unavoidable difficulty of the effect of apprenticeship upon existing conditions in the industry at the outset of its application by permitting a continuance of the employment of youth labour already engaged when the Ordinance became operative, while at the same time offering the opportunity to employers and to youths to arrange apprenticeship. The Apprenticeship Board would assess the attainments of applicants and determine the stage of apprenticeship to which they might be safely admitted; i.e., avoid the drudgery and economic disability of commencement of apprenticeship in the first year if their attainments justify their classification at a higher stage.

The trades already declared as Apprenticeship Trades in the Federal Capital Territory include: Carpentry and Joinery, Painting, Plumbing, Bricklaying, Plastering, Fitting and Machining, Woodwork Machining, Motor Mechanics, Electrical Fitting, Electrical Mechanics, Blacksmithing, and Tilelaying.

The Apprenticeship Board will add to this list as occasion requires with due regard to local industrial conditions and the corollary of expansion of provision for technical training

corollary of expansion of provision for technical training.

During 1937 it is proposed to expand the vocational training and evening trade classes to cover the requirements of Painting, Electrical Mechanics, Electrical Fitting and Plastering. This expansion will entail further outlay in accommodation, equipment, and staffing, but will be regarded as fully justified in the execution of policy.

The experiment of vocational training and the associated introduction of an apprenticeship scheme is confidently felt to be a sound conception. It is a definite factor in the elimination of the increase in the number of unskilled youths attaining manhood without industrial qualifications, in the arrestation of a

definite menace of gradual extinction of skilled craftsmanship in the industrial fabric of the nation, and the preparation of the nation for the widely recognised imminence of rapid development in secondary industries. This objective is regarded as essential if Australia is to keep pace with world development in trade and commerce.

The important historical significance of the establishment of the Apprenticeship System in the A.C.T. (the Apprenticeship Ordinance was passed in August, 1936) is that by virtue of the provision for compulsory attendance by apprentices at trades classes, a guarantee of permanency now became attached to the school as an institution.

Another significent feature of the apprenticeship scheme, believed to be unique, is the policy requiring persons accepting Government building and engineering contracts to employ apprentices in the principal trades that may be involved.

In March, 1937, Mr. A. Hope was appointed as part-time instructor and "Co-Ordinator of the School" (acting for the Registrar) and urged the need for greater selectivity of students and a broadening of the Vocational Training School course curriculum to include English, Civics, and Mathematics in an endeavour to repair foundational weaknesses in those subjects, so that the students subsequently selected as apprentices might have reasonable prospects of success in their trade courses.

Following a Conference in December, 1938, with Mr. A. W. Hicks, then Superintendent of Technical Education, Mr. Daley reported:-

"It was agreed that the Vocational Training School should be developed gradually, by making the training less specialised, into the Canberra Technical College.

The Department (Technical Education) arranged to work out

the changes in syllabus in detail with the object of taking the first step next year . . . One important matter is the placing of the whole of the staff under the direction of one of the trained teachers who will act as Teacher-in-Charge and therefore be responsible for discipline and local management of the School, subject to directions from this Branch as to policy and from the Education Department as to technical details."

In 1938, the N.S.W. Technical Education Branch requested the submission of an Annual Report of operations and future proposals and Mr. D. S. Burgess (appointed Sub-Registrar-August, 1938) in his report of 4th January, 1939, stated:-

"The Canberra Technical School consists of the Trades School, Vocational Training School and the Sheep and Wool Classes. Enrolments in 1938 were as follows:—

Vocational Training Classes Full-time		Trades Classes Part-time	
Motor Mechanics Carpentry & Joinery Bricklaying Plumbing & Sheet Metal	11 12 13 5	Fitting and Machining Carpentry and Joinery Bricklaying Housepainting Plumbing Plastering Electrical Trades	29 27 33 13 17 8 10
	41		137

In August, 1939, the designation of the school became Canberra Technical College and in December, 1939, advice was sent to the N.S.W. Superintendent as follows:—

"If the School continues to expand its normal activities (excluding the special provision being made for training aircraftsmen) the time will arrive when a full-time Principal must be appointed . . . "

In his report for 1939 the Sub-Registrar, Mr. D. S. Burgess, stated:—

"New classes were commenced in Radio Mechanics, Showcard and Ticketwriting, Oxy and Electric Welding and Graining and Marbling. On November 6, the classes in Cookery, Laundry and Housewifery which were conducted at the Evening Continuation School were transferred to the Technical College."

"The Vocational Training Classes continued and Mr. L. A. Wil-

liams was appointed Full-time Teacher-in-Charge.

"During the third term of the year a number of aircraftsmen of No. 8 Bomber Squadron, Canberra, attended classes in Welding Fitting and Machining, Motor Construction and Mechanics, Electrical Fitting and Radio Mechanics."

"On 20th December a scheme for the technical training of Air Force recruits was brought into operation and special day and evening classes were inaugurated for the purpose of training recruits in Mechanical Fitting. Arrangements are being made for the training of Airmen in Welding and Cookery."

Enrolments in 1939 totalled 483 including 60 R.A.A.F. trainees (full-time), 84 full-time Vocational students and 339 part-time students.

At the end of the year 1939, an all-steel structure of modern design for use as a workshop for students of electric and oxyacetylene welding was constructed by students of the College. No rivets were used in the building and the welding was done entirely by the electric-arc process.

Buildings which were under construction at the end of the year (1939) included new Bricklaying and Carpentry Workshops, Electrical Trades Workshop, two class rooms, three offices, staff room and library.

A recommendation was made in April, 1940, for the appointment of a full-time Assistant Registrar and Mr. H. Kruger was appointed.

### The War Period, 1940-45

The main features of the College development during this period were:—

### 1. Administration

By arrangement with Mr. P. D. Riddell, then Superintendent of Technical Education, N.S.W., the College status was raised and in January, 1941, the first Principal, Mr. J. R. Danks was appointed.

Mr. Danks was succeeded in 1941 by Mr. S. A. Broome. Mr. W. J. Lind succeeded Mr. D. S. Burgess as Registrar (part-time) in 1943. Full time Assistant Registrars appointed followin Mr. H. Kruger, were Mr. H. Daiy 1942, and Mr. P. R. McIntosh, 1943.

It was decided in 1941, that appointment of part-time teachers would be made locally. Hitherto, approval from the Technical Education Branch was necessary for all such appointments and payment of salaries and allowances was also taken over by the Department of the Interior, at this time.

Following reports by officers of the Department of Education and the Technical Education Branch, the Vocational Training Classes were abandoned at the end of 1940, and replaced by a two year Pre-Apprenticeship course on the Technical Education Branch pattern, which provided for the subjects of English, Maths. I and II, Elementary Science, and Social Studies. The entrance standard required was the completion of the second year of secondary schooling, and after one year of operation the classes were abandoned, potential students for such classes remaining at their normal secondary schools.

The normal part-time evening apprenticeship trades classes were continued throughout the period and in addition, provision was made (in 1944) for the establishment of Printing classes—Composing, Letterpress Machining and Bookbinding. In this respect, the technical advice and practical assistance rendered by the Government Printer, Mr. L. F. Johnston were

substantial.

The range of miscellaneous technical and non-trades classes 3. was extended to include:-

> Shorthand (Theory and Speed). Preparatory Diploma Subjects Commercial Art and Drawing Radio Telegraphy Showcard and Ticketwriting Producer Gas Vehicle Operation Invalid Cookery Radio Servicing Laboratory Assistants Course.

The R.A.A.F. Training Scheme

A summary of the scope and achievements of this scheme is provided by the following statement issued November 15, 1945, by the then Minister for the Interior, the Hon. H. V. Johnson, at the conclusion of the war:-

"It would be of interest to the public, said Mr. Johnson, to know some of the details concerning this aspect of the war effort in which the College had taken an important part.

When the system of training was introduced in 1939, a request was made by the Department of the Interior, that the College should be regarded as a training establishment and after investigation by the Director of Industrial Training (Mr. E. P.

Eltham) approval was given accordingly.

Training commenced on December 20, 1939, with 60 trainees. The work was undertaken at short notice and great difficulty was experienced in providing the ncessary accommodation and equipment, but the enthusiasm of those concerned enabled many obstacles to be rapidly overcome. The training was inaugurated under the immediate direction of Mr. A. J. Martin, whose services were borrowed from the Department of Education, and three other members of the original staff were Messrs. K. R. Taylor, D. C. Nelson and W. Tillie, all of whom had remained on the staff throughout the whole period of training. The general supervision of the training was later taken over by the newly appointed Principal of the College, Mr. J. W. Danks, who was succeeded by the present Principal, Mr. S. A. Broome, both of whom had devoted themselves unreservedly to the task of maintaining a high standard of tuition.

The course as originally designed was for 16 weeks, afterwards reduced to 12 weeks for each training group, and comprised in-

struction in practical fitting, drawing, electricity and magnetism,

mathematics and trade theory.

Upon satisfactory completion of the course the trainees proceeded to other R.A.A.F. schools for more specialised instruction, their selection for allotment to definite technical categories being made largely on the basis of the qualifications evidenced during their course at the College.

The number of trainees in attendance at the school increased rapidly until early in 1943 when it reached 340 and it was necessary to conduct the work in two shifts. Later the numbers were reduced to approximately 250. A staff of 19 teachers

was devoted entirely to these training courses.

The number of courses undertaken was 112 and the total number of trainees who passed through the College was approximately 5,500.

The trainees were accommodated at the No. 2 School of Technical Training, Kingston, which was specially erected by the Department of the Interior for the purpose.

The Minister stated that he desired to acknowledge the excellent co-operation which was extended at all times by the various Commanding Officers and the staff of 2STT towards the Principal and staff of the Canberra Technical College. satisfactory results that had been obtained, and definitely acknowledged by the Air Board, were undoubtedly due to this excellent team work. Mr. Johnson stated that he desired particularly to thank the Principal, Head Teacher and other members of the staff of the College for their devotion to duty and the very fine service that they had rendered to Australia's war effort in connection with the training scheme."

The various Ground Staff musterings for the R.A.A.F. for which training was provided were:--

(a) Aerofitters

(c) Instrument Makers

(e) Fitter Motor Boat Crew

(g) Welders

(i) Fitters General

(k) Turners

- (m) Flight Riggers
- (o) Electricians
- (r) Armourers

- (b) Airframe Fitters (d) Fitter D.M.T.
- (f) Metal Motor Body Builders

(h) Plant Operators

(j) Instructors (1) Flight Mechanics

- (n) Wireless Assistants
  - (q) Instrument Repairs

The following letter (referred to in the Minister's statement above) addressed to the Principal of the College on September 18, 1945, by Mr. M. C. Langslow, Secretary, Department of the Air, is an indication of the valuable contribution made to the war effort by the Canberra Technical College.

"It is desired to express through you, the thanks and appreciation of the Royal Australia Air Force for the assistance given by the Canberra Technical College during the war period in the

training of ground personnel.

The Trainee (fitter) Courses conducted by your engineering section were of great value in bringing airmen to the required technical trade standard. The fact that your co-operation and help were so freely extended during the difficult war period redounds further to the credit of your College.

It is particularly desired that the members of your staff concerned should know of the Royal Australian Air Force's appreciation. To them remains the life long satisfaction of havin very materially contributed to the success of Australia's war

effort.'

### 5. The Munitions Training Scheme

Approval was given in October, 1940, for the extension to Canberra of the Commonwealth Training Scheme for the training of male Turners, Machinists and Fitters for subsequent employment in the munitions factories.

Provision was made also for the training for subsequent employment in munitions of Women Munition Workers in gauging and testing, blue print reading, bench work and drilling.

Under this scheme, which ended in 1944, 341 munition workers (mainly fitters and turners) were trained.

Useful projects completed by the trainees as practical exercises under the scheme included lathes, cutter grinders, quantities of limit gauges and Bren gun carrier parts for the Department of Munitions, apparatus for the Canberra Hospital an other A.C.T. institutions. Up to 1943 the estimated value of projects produced was £4,000. In addition, machine tool repairs at the College were carried out by the trainees.

### 6. Training of Technicians for the Defence Services.

In 1942, provision was made for instruction of men desirous of enlisting subsequently in a technical unit in one of the defence services in blue print reading, precision measurement, benchwork, marking off and drilling. Service personnel stationed at Fairbairn, Duntroon and Harman were admitted to these classes.

### Air Training Corps.

In 1942, the College also became the training headquarters for members of the 43rd Air Training Corps Squadron under the command of Squadron-Leader W. G. Woodger, Flight Lieutenant S. Broome (Principal of the College) and Flight-Lieutenant T. Owen (Registrar of the Canberra University College).

Classes were provided in Mathematics, Aircraft Recognition,

Navigation, and Engineering Subjects.

The 43rd A.T.C. Squadron maintained a steady flow of enlistments for the R.A.A.F. in musterings as Ground Crew, Pilots, W.A.Gs., Observers and Airgunners. They built an enviable record, many paying the supreme sacrifice.

### 7. Instructional Facilities

To provide for the R.A.A.F. and Munitions Training Schemes substantial extensions were made to the Kingston accommodation (which was more than doubled in the year 1940) and equipment—particularly in respect of machine tools and hand tools. An important acquisition was the setting up of an engineers store in 1940 and the layout of the machine shop was rearranged in 1941.

### 8. Preparation for C.R.T.S. Training

In preparation for post-war rehabilitation training Mr. Broome (Principal) was appointed as Deputy-Director of Industrial

Training for the A.C.T. in 1944.

By the time the war had ended in August, 1945, plans were well advanced for the training of ex-service personnel. Training programmes co-ordinated by the Department of Post War Reconstruction through Regional Committees and Industrial Committees were prepared.

### The Post-war Period—1945 to Date:

### 1. C.R.T.S. Training

During the war, the emphasis was laid naturally upon the training of service personnel and engineers for munitions production. In the engineering industry the scheme of dilution was accepted in the accelerated training of fitters, machinists,

etc. The industry was protected, however, against the long term effects of dilution by the Tradesmen's Right Regulation Act, and only approved categories of ex-servicemen (such as apprentices with interrupted courses) were eligible to receive training in engineering trades under the post-war Commonwealth Reconstruction Training Scheme.

Further, the housing lag during the war threw emphasis in the post-war period on training for the Building Trades. As Deputy Director of Industrial Training, the College Principal

was charged with the responsibility of providing initial full-time training (approximately 6-monthly periods) for eligible ex-servicemen, and part-time training for those desiring courses available at the College.

This involved an expansion at the College of accommodation and facilities in the form of machine tools and hand tools necessary for training for the building trades.

By the end of 1945, most of the necessary facilities had been

acquired and orders placed for the residue.

The responsibility for staffing and organising most of the fulltime and part-time training under the C.R.T.S. fell to the lot of Mr. R. Dunbar, who succeeded Mr. Broome as Principal and

Deputy-Director Industrial Training in 1946.

The numbers of ex-service personnel who received full-time training at the College under C.R.T.S. in the various trade

classifications were as follows:-

Carpentry and Joinery	97
Housepainting and Decorating	64
Bricklaying	55
Plumbing	39
Plastering	32
Arboriculture and Gardening	16
Woodmachining Cabinetmaking	8 2
Automotive Mechanics	1
Plastering Fixer	1
Signwriter	1
Typewriter Mechanic	1
	-
	317

A total of 1947 C.R.T.S. students (including some of the 317 mentioned above) have benefitted from part-time courses in subjects of the College curriculum designed to enhance their occupational status or equip them with additional vocational skills in their period of re-establishment in civilian life. By 1951, full-time training had been completed and now only 116 part-time C.R.T.S. students remain enrolled at the College.

### 2. General Development

The provision of additional accommodation and instructional facilities to meet the demand for war-time and post-war training placed the College in the position of being able, as these emergency demands diminished, to offer instruction generally in a wide range of technical and leisure-time cultural courses. So strong has been the demand for courses of this type that the College may now be truly regarded as a large scale adult educational centre, apart from its primary function of providing trade

instruction for apprentices. In 1951, enrolments reached the record figure of 1310, distributed as follows: Trades 347 (including Building 247, Engineering 87, Horticulture 9 and Printing 4), Vocational (non-trades) 438 (including Commercial 228, Womens' Handicrafts 172, Sheep and Wool

38), and Hobby courses 525 (including Pottery 183, Dressmaking 93, Art 102, Woodwork 46, Motor Maintenance 90 and Gardening 11).

Of the students enrolled 187 were apprentices 116 were C.R.T.S.

students and the balance of 1007 were other adult students.

An important development in 1949 was the establishment of Art classes for adults, and Saturday morning Art classes for children. Earlier attempts to form adult Art classes were made during the War period but they could not be continued satisfactorily because of War-time preoccupations. The present classes have now become stabilised and students of varying stages of technical proficiency may now find opportunity for development and artistic expression.

The Child Art classes are enthusiastically attended by school children for whom insufficient opportunity is available in their normal school curriculum to satisfy their desire for art expression.

There has been a progressive development of Commercial and Accountancy courses, including full-time courses for Shorthand and Typewriting following the establishment in 1950 of the Commonwealth Public Service Board Typist-in-Training Scheme. The vocational prospects for girls in Canberra are now enhanced, and it is unlikely that a future need to import typists to Canberra will arise.

The policy of recruiting full-time staff from the N.S.W. Department of Education, which was confirmed in 1946, has been pursued where courses have appeared ot be stabilised by the demand. In 1947, one teacher was appointed from N.S.W. By 1951 however, a total of twelve had been appointed including a Head Teacher of Building Trades. The advantage of this policy is that trained teachers are obtained and the promotional avenues for the staff exist beyond the local sphere of their profession. An important training policy was decided upon at the beginning of the 1949 College year. Hitherto, provision had been made in the Apprenticeship Scheme for employers to release their apprentices to the extent of four hours per week in working time for attendance at the College classes.

In January, 1949, the Apprenticeship Board decided that day training to the extent of eight hours weekly should obtain during the first four years of apprenticeships. There is evidence that the implementation of this policy has had the effect of improving the quality of work by apprentices in their College courses.

Three new workshops were opened on the Kingston site during 1950 and modern equipment installed for instruction in Fitting and Machining, Automotive Mechanics and Electric Trades. In the Engineering Machineshop the machine tools have been converted to individual motor-drive and much of the work of conversion was undertaken by the apprentices.

### 3. Trade Testing

In his printed report for 1950 Mr. R. Bruce Brown (who succeeded Mr. Dunbar as Principal and D.D.I.T. in 1948) referred to a further service provided by the College arising from the Commonwealth Government's post-war policy of immigration.

"A non-instructional activity of the College which has assumed large-scale proportions is that of trade testing. This activity was initiated in 1949, in co-operation with local industrial organisations, as one of the means of assessing the skills of New Australians with a view to their employment in trades short of

man-power.

Apart from its interest in facilitating the assimilation of our New Australian friends and the economy of the process, the College is concerned with the development and maintenance of trade standards as one of its leading community functions and the testing service is available to all who may seek accreditation.

New Australians who have been able to produce this practical evidence of their trade skill have subsequently been transferred from their unskilled occupations to occupations of their choice and for which they had been trained in their former countries." The numbers tested and the results since the tests were started are as follows:—

Bricklaying	sted Successful 05 449 89 45 85 23	
Others	25 25 34 518	

At the present time Mr. A. Jack (Head Teacher of Building Trades) is on leave in Europe selecting Carpenters for a Canberra firm and, as part of the selection procedure, is conducting trade tests in Germany, Italy, and other Western European countries. This is illustrative of the goodwill and confidence which the teaching staff has won in the Canberra community, Mr. Jack having received the approval of the Union concerned in his mission . Whilst the B.W.I.U. policy generally is that every immigrant tradesman shall be trade-tested upon arrival in Austrade tests are dispensed with in Canberra in the case of those tradesmen selected by Mr. Jack.

### 4. Services Provided for Other Canberra Institutions

Apart from the demand for instruction from individual students, the College has pursued the policy of assisting where practicable and appropriate, other Canberra organisations and educational institutions. In addition to continuing classes in Invalid Cookery for the nurses of the Canberra Hospital, and Wool Classing for boys enrolled at the Canberra Grammar School (which has been the practice for a number of years) provision was made in 1950-51 for the establishment of the following classes:—

Full-time shorthand and Typewriting for Typists-in-Training recruited by the Commonwealth Public Service Board.

Workshop Practice for R.M.C. Duntroon Cadets. Motor Maintenance for Australian Forestry School

Dressmaking for students enrolled at the Canberra Church of England Girls Grammar School.

### Summing Up:

Cadets.

In the course of its development, the achievements of the College have been substantial:—

- A constant supply of local tradesmen and technicians has been trained to assist in the building and maintenance of the National Capital.
- More than 5,000 trainees for R.A.A.F. ground staff musterings and over 300 workers for munitions factories were provided

with their basic training during the war years.

3. More than 300 ex-service personnel were assisted by training towards rehabilitation in a trade after the war, hence augmenting the supply of local craftsmen.

In regard to (2) and (3) the numbers trained were, pro rata to population,, far in excess of those trained in other regions of the Commonwealth.

Finally, the number of Canberra citizens taking advantage of the leisure-time technical and cultural educational courses bears out Mr. Nangle's prediction in 1925 "that the people of Canberra will be the type placing high value on education."

### **ACKNOWLEDGEMENTS:**

The history would be lacking if due acknowledgement were not paid to the citizens of Canberra who in their various voluntary capacities have contributed much towards development which is here Those who have served as recorded. members of the Vocational Training Committee in 1931-32, the Apprenticeship Board since its inception in 1936, the Local Dilution Trades Committee during the war period, the C.R.T.S. Regional and Industrial Committees during the postwar period, and the Prize Fund Committe since its inception in 1943, will feel rewarded by the knowledge that their contributions have assisted to build a permanent and important institution in their local community, the National Capital of Australia.

The service which has been extended over the years by the N.S.W. Department of Technical Education has been responsible in no small measure, for the standards of the College as it now exists.

In the preparation of this short history of the Canberra Technical College, which extends beyond the period of office of the writer as Principal, valuable assistance has been forthcoming readily from past and present members of staff and from those officers of the Civic Administration of the Department of the Interior (notably C. S. Daley, H. R. Waterman and W. J. Lind) who have been responsible for inaugurating and fostering the development of the College.

# CANBERRA TECHNICAL COLLEGE

# **ADMINISTRATIVE PERSONALITIES**

### 1925-30 FEDERAL CAPITAL COMMISSION

Chief Commissioner: Sir John Butters. Secretary: C. S. Daley.

Asst. Secretary: H. R. Waterman.

### 1930-32 DEPARTMENT OF HOME AFFAIRS

Civic Administrator: C. S. Daley.

### 1932-51 DEPARTMENT OF THE INTERIOR

SECRETARIES-

1932-H. C. Brown. 1934-J. A. Carrodus. 1950-W. A. McLaren.

ASSISTANT SECRETARY (Civic Administration -

-C. S. Daley.

SENIOR CLERKS-

1932—H. R. Waterman. 1938—D. S. Burgess.

1943-51-W. J. Lind.

ASSISTANT SECRETARY (A.C.T. Services)-

1951-H. R. Waterman.

SENIOR CLERK-

1951-W. J. Lind. PRINCIPALC

	(Full-Time)	(Part-Time)	(Full-Time)
1928		J. Fenston	
1930		E. H. Handley	
1932		H. S. Temby	
1933		K. J. Varrucan	
1934		H. R. Waterman	
1938		D. S. Burgess	
1940			H. Kruger
1941	J. R. Danks.		
1942	S. A. Broome		H. G. Daley
1943		W. J. Lind	P. R. McIntosh.
1946	R. E. Dunbar		
1948	R. Bruce Brown		

DECICEDADO

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