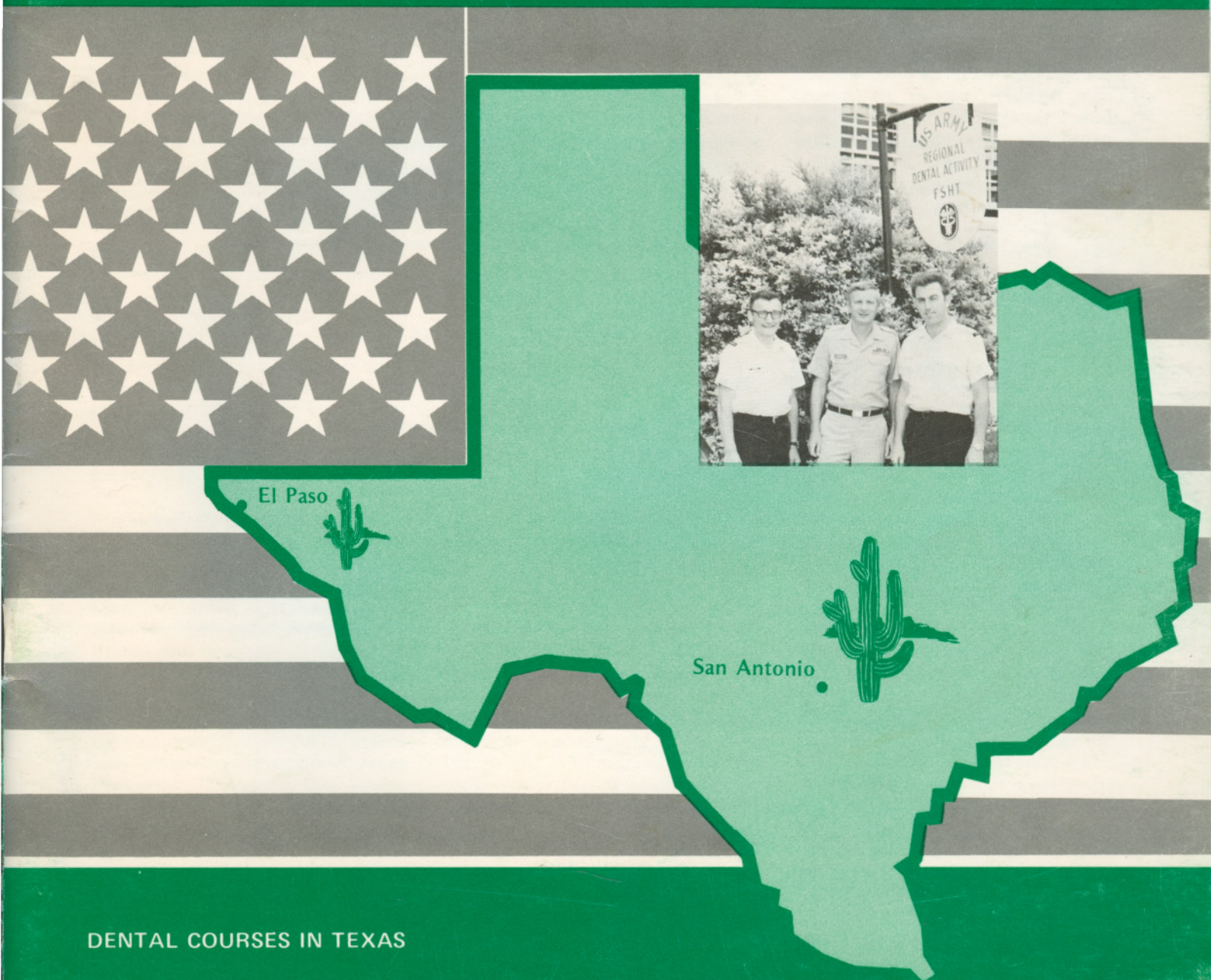




# The Canadian Forces **Dental Services** Quarterly

Volume 19, number 3, 1978



DENTAL COURSES IN TEXAS





# The CFDS Quarterly

Volume 19, number 3, 1978

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## COVER

Wo's Hans Gapmann, left, and Tom Taylor, right, with Col James S. Brudvik, Commander of the US Army Regional Dental Activity at Ft Sam Houston, Texas.

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# PORCELAIN COURSE IN TEXAS

WO T. TAYLOR, CD  
WO H. GAPMANN, CD



The Canadian Forces Dental Services "Porcelain-Fused-to-Gold" training has recently received a welcome addition with the introduction of On Job Training at the US Army Regional Dental Activity (RDA), Fort Sam Houston, San Antonio, Texas. As the first CFDS laboratory technicians to attend such training, in March and April 1977, we were happy to be chosen for this task. We arrived in the beautiful city of San Antonio after a flight via Montreal and Chicago. In a few hours we had left winter behind us and found ourselves amid lush greenery in a sunny and warm Texas. Our host and sponsor, Sergeant First Class (SFC) Morris Champion, met us at the airport and whisked us away to our elegant accommodations at the Fort Sam Houston Bachelor Officer Quarters, where we each had a bedroom suite with an adjoining kitchenette. The American military certainly went out of their way to make our stay as pleasant as possible.

Fort Sam Houston is a large U.S. Army post, and is one of five military bases in the San Antonio area. It is noted for its Brooke Army Medical Centre, acclaimed as the foremost burn centre in the United States and probably in the world. The centre was the leader in the research and development of new wound dressings for burns, such as the development of a sterile jelly to replace conventional gauze dressings. It was at this facility that fourteen of the badly-burned aircrash victims from the Canary Islands were treated during our stay. The base also houses the Health Sciences Academy, a large modern training facility of which the dental faculty is an integral

part. During our tour of the faculty we could observe many large and modern classrooms, operatories, and laboratories, all well equipped and run by a highly qualified staff. We were impressed with the high standard of training in all of the dental fields, whether it be the assistant, hygiene, or laboratory trade.

Fort Sam Houston is home to a U.S. Army Regional Dental Activity (RDA), one of four such facilities in the United States. The other locations are Washington-D.C., Alameda-California, and Atlanta-Georgia. All dental laboratory cases from the mid-central U.S. as well as from Europe and the Canal Zone are sent to be processed at the Fort Sam Houston R.D.A. The laboratory employs 52 technicians, with six civilians included in this number. Their Commanding Officer is Colonel James Brudvik, who is a prosthetic specialist. The laboratory is divided into two sections, the Removable Partial Denture section commanded by Colonel Nelson and the Fixed Partial Denture section commanded by LCol Conway. Although the U.S. Army still has many smaller laboratories at clinic locations, they have successfully centralized most of their laboratories, pooled their equipment and appointed specialist officers to check incoming and outgoing work, thereby ensuring high quality prosthetic appliances. The RDA laboratory is equipped with the most modern equipment, which is replaced on an eight year cycle to minimize repairs. Their supply section is housed in the same building and is staffed by logistics personnel, thus freeing the laboratory technicians to concentrate on their work.

SFC Morris Champion is the senior laboratory technician and he supervises the crown and bridge section. He has many years of experience in the porcelain field, and as our instructor for the month long stay, he had a wealth of information to pass on to us. The RDA laboratory technicians work at one phase of the production line in order to streamline the whole process. The fixed partial denture section is roughly divided into wax-up, investing, trimming and polishing, and the porcelain stages. This last stage includes opaquing, porcelain build-up trimming, glazing, and staining.

Our training schedule was informal, in that we could work in any of the phases of the porcelain technique as required. The first week was spent trimming metal frameworks in preparation for the opaquer and porcelain. This enabled us to work on a large number of cases, noting their different designs as we trimmed them. We then spent the second week waxing-up, investing and observing the casting procedure.

The wax-up phase was made relatively easy with the use of plastic copings. These copings fitted the dies well, were rigid, and did not distort during the investing process, as well as providing for a uniform thickness of  $\frac{1}{2}$  mm in the finished casting. The use of these copings helped to speed up the wax-up phase considerably, and it reduced the margin of error in the finished casting. Like the CFDS, the RDA uses Ceramco porcelain and finds it to be an excellent material. The majority of cases were cast in Cameo gold, a hard, white, 52% gold, which we found easier to polish and solder than



Jelenko "O" gold, which is presently being used by our porcelain laboratories.

Part of the second and most of third week of our stay was spent in applying, firing, adding, and shaping the porcelain on many different metal frameworks, starting out with single units at first, but also working on three to six unit bridges as our training progressed. SFC Champion and the Health Sciences Academy had provided us with study material on the complete Ceramco technique. We studied, took many notes, and asked many questions which our instructors always had time and patience to answer.

The last week of our stay was devoted to the finishing process of porcelain-fused-to-metal restorations. This was the stage where a critical eye was required in the final shaping, glazing and staining of the porcelain. We received many helpful hints from the members of the RDA team, and this was a most enjoyable week for us, seeing the porcelain restoration attain its high lustre. After the many steps in the production and the amount of work which had been applied, a truly fine restoration had been made with excellent esthetics, tissue tolerance, and durability. The last stage in the production line at the RDA comes when SFC Champion, and later LCol Conway, check the finished product for function, shade, and quality of workmanship. When they pass the work on to the mailing clerk for shipment to the outlying clinics, one can be certain that it has been checked over with the utmost scrutiny.

We found that our American hosts and instructors were most helpful and hospitable, and aside from work, we had many happy occasions of socializing with them. We also had the good fortune to spend a weekend of camping and fishing at beautiful Canyon Lake with Sergeant Jesse Kendrick. Canyon Lake is situated forty-five



WO's Gapmann and Taylor "grinding it out".

miles north of San Antonio and is a large man-made water reservoir. The U.S. Army has set aside about 100 acres on the lake for use by its members and their families. We also went sightseeing in beautiful San Antonio, and visited such popular places as the Alamo, site of the famous battle in 1836 during the Texas Revolution. We also visited "La Villita", where 18th and 19th century buildings have been re-constructed, and the "Hemisphere" with its popular pavilions from an earlier world-fair. The San Antonio river presents many picturesque views as it winds through the old Inner City, with numerous restaurants and cafés along its riverwalk. Each year, San Antonians enjoy a week-long celebration called "Fiesta", with riverboat parades, fireworks, military displays, and many other festivities related to their colorful past.

Having enjoyed the extraordinary hospitality of our colleagues and neighbours to the

South, we returned home to Canada richer for this experience. The monthlong training had been very useful, as we were able to learn the basic skills required in the "Porcelain-fused-to-Gold" technique. The variety of clinical cases we had the opportunity to work on, as well as the "production-line" setting, has given us a wide range of basic experience in this field. The different materials used, and the additional techniques discussed, have helped to broaden our knowledge. We hope that this On Job Training in Fort Sam Houston will not replace the three-day formal course at Jelenko in New Rochelle, but will serve as a welcome and valuable addition to our present "Porcelain-fused-to-Gold" training program.

Editor's note: Since this article was submitted for publication, Sgts R.F. Abfalter and B.F. Hannah undertook identical training at Fort Sam Houston, in February and March 78. They also were very enthused by the program and very appreciative of the generous hospitality of their American hosts.



# Post Graduate Training Fixed Prosthodontics

MAJOR W.A. GRAY, CD, DDS\*



Having recently returned from two years of training in Fixed Prosthodontics, I feel that members of the CFDS who are considering applying for advanced training might be interested in knowing something about such a programme. The following will acquaint the reader with a particular programme, but much of the information is valid for other United States Army Dental Corps programmes as well.

The programme is an ADA accredited two year residency in Fixed Prosthodontics. There is no affiliation with an accredited university; therefore, it is not possible to obtain a MSc. Upon successful completion of the course, a Certificate in Fixed Prosthodontics is awarded which will qualify you to write the Board exams of the American Board of Prosthodontics and the examinations leading to a Fellowship in the Royal College of Dentists of Canada.

Although there is some variation in the prosthodontic programmes offered by the U.S. Army Dental Corps, they tend to be clinically orientated rather than didactic in nature. Seventy-five percent of the time was spent on clinical phases of the programme and the remainder on didactics. The Fixed Prosthodontic programme had the clinical time divided so the candidate spent twenty-five percent of his time in Removable Prosthodontics and seventy-five percent in Fixed Prosthodontics. These programmes are designed to allow the students to actively

participate in their own training by selecting some of the material to be covered and in presenting lectures to the staff.

## THE PROGRAMME

A typical work week consisted of 5½ days broken down as follows:

- |       |  |
|-------|--|
| Mon   | — 0730-0830<br>— resident lecture<br>— 0830-1630<br>— patient treatment  |
| Tues  | — 0730-0830<br>— resident lecture<br>— 0830-1630<br>— patient treatment  |
| Wed   | — 0730-0830<br>— review of Board exams<br>— 0830-1630<br>— patient treatment   |
| Thurs | — 0730-0830<br>— staff lecture<br>— 0830-1200<br>— patient treatment<br>— 1300-1630<br>— staff and guest lecturers in basic sciences |
| Fri   | — 0730-0830<br>— literature review<br>— 0830-1630<br>— patient treatment   |
| Sat   | — 0800-1200<br>— gnathology seminar  |

\*Maj Gray graduated from Dalhousie University in 1967. After 8 years of general practice at different locations in Canada and Europe, he undertook post-graduate training in Fixed Prosthodontics with the U.S. Army Dental Corps, El Paso, Texas, from 1975 to 1977. He is presently the Head of the Fixed Prosthodontics department at the CFDS School in Borden.

There were three residents in the programme which meant each of us had to prepare and present a one-hour lecture every ten days as well as taking turns conducting the Saturday morning gnathology seminar. During the Board question and literature review sessions the residents took turns answering the questions or reviewing assigned articles. During the staff lecture periods our own mentors or well-known authorities from various areas in the States lectured in the specific fields of dentistry, including the basic sciences.

Preparation for the lectures and seminars required an average of two hours or more work each night and five to ten hours on the weekend.

During the two years the residents attended two major prosthodontic conventions and spent three weeks on courses associated with prosthodontics. One week was spent at M.D. Anderson Maxillo-Facial Centre in Houston, Texas. This was mainly a week of observation. Another one week course was at the Lancaster Cleft Palate Clinic in Lancaster, Pa. This was a week of familiarization lectures and demonstrations in the treatment of cleft palate patients. The third course was also



a week in length. This was an intravenous and nitrous oxide course given at W.B.A.M.C. by Walter Reed Army Medical Center staff members.

## THE FACILITIES

The facilities at William Beaumont Army Medical Center are excellent. The hospital is a modern twelve-storey building located in El Paso within several minutes' drive of a number of residential areas. The hospital houses both the medical and dental facilities. The medical side employs specialists from pediatricians to cardiologists, treating active and retired military personnel as well as dependents. The dental clinic employs specialists in periodontics, endodontics, oral surgery, oral pathology and microbiology as well as fixed and removable prosthodontics. Altogether there were eight mentors and eight residents in several specialties including oral surgery, fixed and removable prosthodontics.

## THE GENERAL AREA

El Paso has a population of 325,000 and is located on the Mexican-American border in the south-west corner of Texas. The area is basically desert with cactus, tumbleweeds and an average rainfall of 9", most of which comes in July. Although the terrain is flat for the most part, it does have small mountain ranges scattered around the area, in fact, some of the ranges located two hours away provide excellent skiing in season. The average summertime temperature is 104 degrees F. at midday, dropping to 80 degrees F. at night. The winter temperature is approximately 60 degrees F. during the day and drops to as low as 25 degrees F. at night.

## FAMILY CONSIDERATIONS

In my opinion, it is advisable to consult someone familiar with a particular area before moving or

better still to visit the area. Housing, schools and transportation are some of the areas which should be carefully investigated. During a residency, your family will see little of you at times and it makes it more pleasant if their surroundings pose as few problems as possible. Fortunately, lifestyles aren't much different than in Canada and there are few problem areas.

On some American bases, you will be authorized military housing, on others such as El Paso, there will be no entitlement. Off-post housing tends to be less expensive than in Canada and in El Paso there was no shortage. When renting accommodation, the Canadian Government will pay all your utility charges and under certain conditions subsidize the rent. Caution should be used in selecting your neighbourhood for a number of obvious reasons. Most of the areas we are most likely to be posted to for training are large military medical centers with a high ratio of retired U.S. military personnel and it is important to avoid neighbourhoods where there are few or no children, especially if you have children of your own. Children with no playmates can get on your nerves at times!

Schooling facilities vary from one area to another, but in general tend to be equivalent to our schools. If the facilities are not up to Canadian standards, there is an education allowance available to help cover the cost of attendance at some other more suitable facility.

Shopping facilities are excellent in the local area and additionally, foreign service personnel are allowed full use of the American Post Exchange (PX) and Commissary. Food costs in the El Paso area tend to be much less than in Canada.

My overall impression of the programme is a very favourable one. Its content was excellent and

the staff and my fellow residents were of a quality that, in my opinion, has no equal. My two years with the U.S. Army Dental Corps were very rewarding both professionally and socially, because of the close friendships established during the course.

I have tried to present a brief outline of one programme as it existed in 1975-77. As was mentioned earlier, all programmes won't follow the same pattern and indeed this one programme will change from time to time depending on the staff. It is hoped, however, that those considering such a programme will have benefited by having read this article.







# CORRECTION of a Class III Malocclusion Through Removable Orthodontic

MAJOR K.R. MORLEY, CD, DDS\*

## BACKGROUND

Class III malocclusions may be classified according to their origin. They may be of dento-alveolar origin, skeletal origin due to micromaxilla or macromandible, or neuromuscular or functional origin.<sup>1</sup>

Patients with a micromaxilla will display a short palate and a high vault. The crowding in the maxillary dentition, which is often present, leads to impaction of the maxillary canines. These cases are best treated by a combination of full-banded therapy and surgery.

The macromandible patients demonstrate an excessive length of the mandible due to a long neck of the condyles, ramus, or corpus. The mandibular incisors are often tipped lingually, the chin is pronounced. The mandibular dental arch is often not crowded. A complex surgical-orthodontic approach is usually best for these patients.

Dento-alveolar mesiocclusion is generally associated with maxillary collapse in cleft palate patients. The orthodontic treatment required is a highly specialized field involving complex mechanics.

The functional class III malocclusion, on the other hand, can in many instances be treated with relatively simple orthodontic mechanics. In these patients, the mandibular path shows a mesial displacement. The profile will usually improve as the mandible drops from occlusion to rest. The maxillary incisors are frequently crowded or in linguoversion. The mandibular incisors are vertical or in slight labioversion. One always finds an excessive interocclusal space from overclosure.

## REPORT OF CASE

A 31 year old Caucasian male officer with 10 years of military service was referred because of an anterior crossbite malocclusion. The medical history was insignificant as was the full mouth radiographic examination.

The patient had a straight profile and an orthognathic facial type without any asymmetries. (See figures 1 and 2)

The intra-oral examination was negative except for an

\*Maj Morley graduated from the University of Manitoba in 1969. He obtained his Diploma and Certification in Pedodontics in 1976 from the University of Toronto. He is presently Instructor and Head of the Pedodontics Division at the CFDS School in Borden.

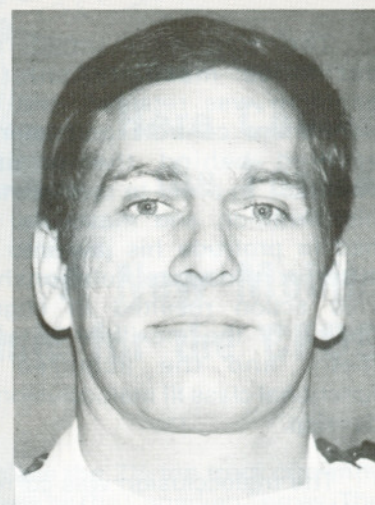


FIGURE 1  
Frontal photograph demonstrating facial symmetry



FIGURE 2  
Lateral photograph of patient demonstrating straight profile and orthognathic facial type



anterior crossbite of teeth 11, 21 and 22, when the patient was in occlusion. Labial wear facets were present on all these incisors. The freeway space was assessed at 5 mm. At rest, the maxillary and mandibular incisors were in an end-to-end relationship. Teeth 11, 21 and 22 were in lingual version, and the mandibular incisors were vertically positioned.

Upon closure, there was a distinct mesial shifting of the mandible. TMJ discomfort was not present.

The occlusion was diagnosed as an Angle's functional class III mesiocclusion. (See figure 3)

The patient claimed his deciduous maxillary anterior dentition was retained, and his permanent centrals and laterals erupted behind the primary dentition. In order to approximate his dentition and masticate, he had to protrude his jaw into an anterior crossbite relationship. This action resulted in lingual tipping of the maxillary anterior teeth, and the acquired or functional class III malocclusion to develop.

The malocclusion was corrected by utilizing a removable orthodontic appliance. This appliance incorporated Adam's clasps on teeth 16 and 26 for retention; a labial arch from 13 to 23 which was designed in such a manner as to allow labial movement of teeth 11, 21 and 22; and modified double "Z" springs were placed on the lingual of the teeth in crossbite in order to move them labially. A posterior bite plane, which extended one-third of the way up the buccal surfaces of the posterior teeth for added retention, was utilized to open the bite, and allow labial movement of the incisor teeth. A posterior bite plane was used to prevent eruption of the posterior segment of the dentition.

The appliance was worn 24 hours a day, except during eating,

for 5 months. The patient was recalled every three weeks, to re-activate the springs, following insertion. (See figure 4)

Once the crossbite was corrected, the appliance was removed, and the occlusion was allowed to establish itself (see figure 5), until complete posterior contact was maintained.

## DISCUSSION

Class III malocclusions are psychologically damaging from a cosmetic viewpoint. Additionally, many patients with this type of malocclusion demonstrate temporomandibular joint problems. This fact is especially common in patients with functional mesiocclusion displacements of the mandible.<sup>2</sup>

Ideally, this patient should have been treated at a much earlier age in the mixed dentition stage of dental development. Sound patient co-operation was essential for success and was achieved in spite of the fact that the removable appliance greatly impeded the speech of the patient.

Fixed multi-banded therapy was not attempted because it was felt that the forces required to correct the malocclusion would have caused excessive discomfort to the patient.

## SUMMARY

A case report has been presented to demonstrate the feasibility of utilizing removable orthodontic appliance therapy to correct a functional Angle's class III mesiocclusion.

## BIBLIOGRAPHY

1. Sassoumi V. Orthodontics In Dental Practice (L.V. Mosby, Saint Louis, 1971).
2. Graber T.M. and Swain B.F. Current Orthodontic Concepts and Techniques Volume 1 (W.B. Saunders, Toronto, 1975).

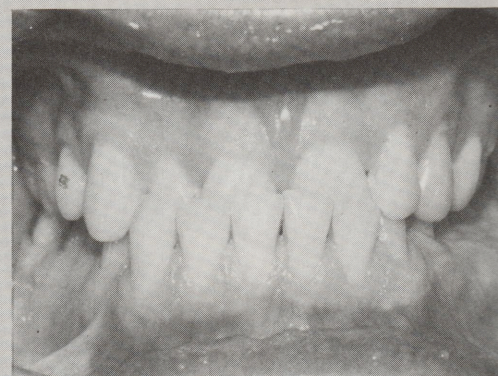


FIGURE 3

Patient in occlusion showing anterior crossbite of teeth 11, 21 and 22

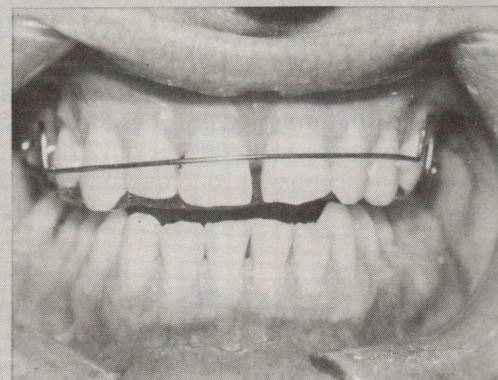


FIGURE 4

Removable orthodontic appliance in place

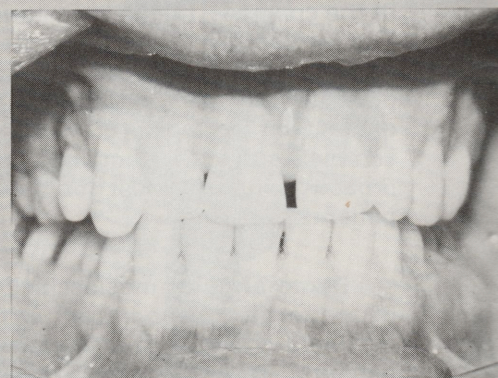


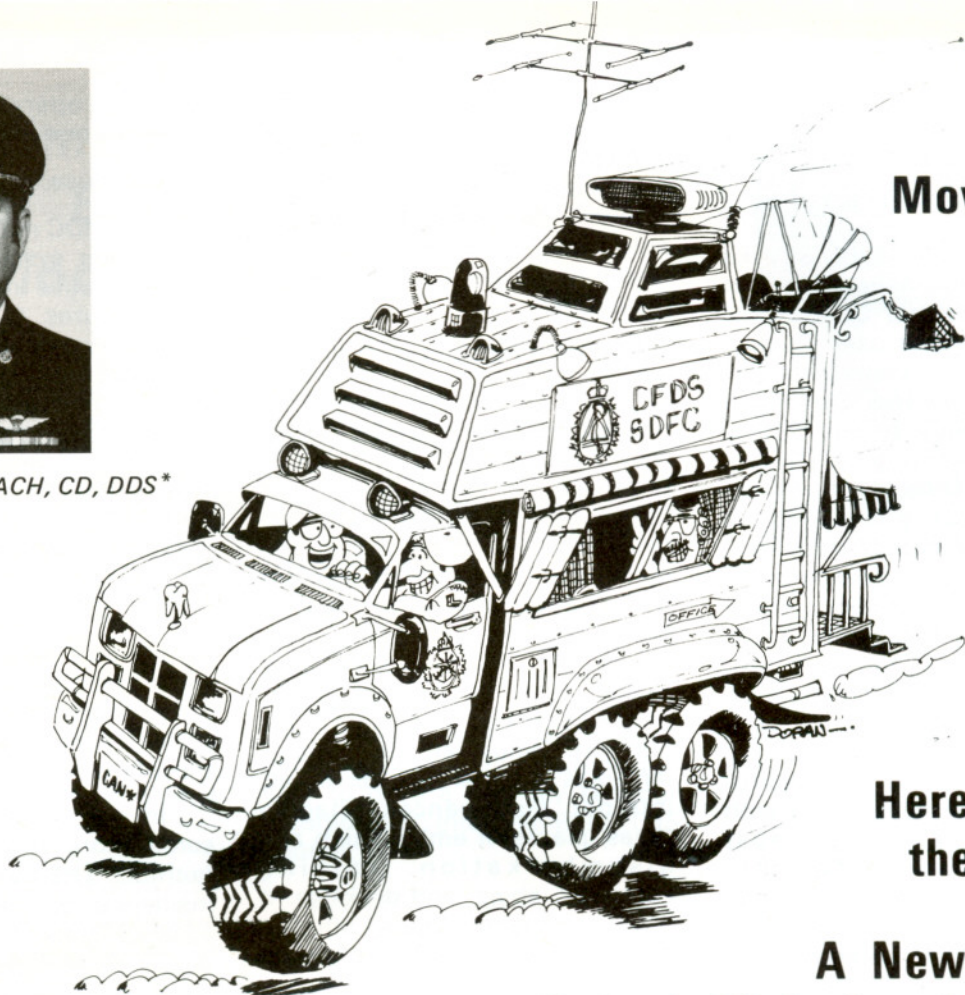
FIGURE 5

Occlusion three months post-orthodontic correction





LCOL H. GRIESBACH, CD, DDS\*



**Move Over,  
Van,**

**Here Comes  
the Future**

## **A New Mobile Dental Clinic for the CFDS**

As ten big wheels in the Canadian Forces Dental Services are nearing retirement — having been the driving force, prime mover even, of our service for so many years — we witness their exit with mixed emotions — delight and rejoicing.

ECC 124 710 Truck, Van, Shop, 2½ Ton, 6 x 6 Dual Tandem M220 Cdn, w/Dental Operating Clinic Equipment, as the ten big wheels (four double, two single) are collectively titled, enrolled in the Royal Canadian Dental Corps in 1953. Today, our twenty-seven vans are deployed half-way around the globe: one in the Middle East, eleven in Germany, two at Gagetown, one at Valcartier, two at Petawawa, eight at CFDS in Borden, one in Edmonton, and one in Esquimalt.

Nobody denies that a mobile dental clinic which was designed for 1953 dentistry has outlived its usefulness in a quarter century of technological advancement. Besides, the old van is plainly tired of driving the body. The need for a replacement is self-evident.

Size alone is a factor. The floor space of the van was sufficient in the past when the dental officer and his assistant operated standing beside the chair in which the patient sat upright. Modern dentistry, as it is practised in the CFDS, demands a reclining position of the patient and a sitting position for both the dental officer and assistant. This set-up calls for more room.

### **One of 51 Varieties**

The Mobile Dental Clinic (MDC) is part of a programme to

replace the 2½ ton truck currently in use by the Canadian Forces. The current dental van is one of 51 different Special Equipment Vehicle (SEV) kits mounted on 898 vehicles. All these SEV kits are being revised for the purpose of adapting them to a new 2½ ton vehicle. Many of the revised kits will be adapted into the standard flat floor drop-side cargo vehicle while others will be incorporated into a specially designed shelter body which will fit inside the standard cargo body. The MDC falls into the latter category. This design will permit the easy removal of the shelter from the cargo body for static operations and the use of the vehicle in a separate cargo role. In addition, high mileage vehicles can be rotated with the lower mileage SEV kitted vehicles to help balance the utilization of the fleet as a whole. Compare this system with

\*LCol Griesbach graduated from the University of Toronto in 1964 and has served in various locations in Canada, Europe and the Middle East. He now serves in the Division of the Director General of Dental Services at National Defence Headquarters in Ottawa.



our present dental van sitting idle in a vehicle compound most of the time, and you will see its economy.

#### Input from all Dental Units

The first step in the SEV kit review was made in the summer of 1977, when NDHQ Directorates who represent the user of each SEV kit, were identified and requested to prepare a "Statement of Requirement". In the Dental Division of the Surgeon General Branch, the Directorate Dental Plans and Requirements solicited input from all dental units and through creative research composed a Statement of Requirement for a modern mobile dental clinic. Unfortunately we did not have carte blanche to make plans for a dream clinic to satisfy all wishes — e.g. a nice big trailer. Rather, we were to ensure that the requirement would be in consonance with known policy. This, most importantly, sets a specific limit to the dimensions of the MDC: It has to be a modular unit (in another word, a box) which fits between the drop sides of the 2½ ton truck which in turn has to fit into the "Hercules" transport aircraft.

#### Prototype by 1980

Presently, at the NDHQ Directorate Support Vehicles Engineering and Maintenance, a project team is working, in close and continual liaison with the Directorate of Dental Plans and Requirements, on a layout — concept — configuration which will embody the constituents of the Statement of Requirement. When, probably after trials and errors, the configuration is completed in sketch or mock-up, and formally approved by the Director General of Dental Services, a prototype of the MDC will be designed, manufactured and assembled. This prototype should be representative of the ultimate product and functional in its intended role. Again, it will be presented to DGDS for formal approval. If all goes according to schedule, this event will take place in 1980. The next stage of the project includes details such as completion of

drawing packages, specifications, purchase descriptions, installation and operating orders, check lists, and initial provisioning. This is followed by the acquisition of equipment, installation, and finally — target date is 1983 — distribution.

#### A Van for all Seasons

What are some of the physical characteristics which we want the new MDC to have? It is to be land/sea/air transportable, so that it may be rapidly and effectively deployed to any geographical area and a variety of locations and in situations where existing dental facilities are inadequate or where no static dental clinic exists, such as combat zones, peacekeeping missions, far northern deployment, humanitarian roles, natural disaster areas, internal disturbances, staging areas, places of embarkation and disembarkation, training exercises, ships, and dockside. It must be capable of being lifted by helicopter, crane and forklift; to be moved across all types of terrain; to have all kits firmly secured within the compartment during transport.

It must have a controlled environment (temperature, humidity and dust control) so that it

can be operated in extreme climatic conditions.

#### A Penthouse, too

The MDC must have a hot and cold water system which can be fully operative in extreme ambient temperatures. It must be capable to be prepared for operation and transport by the three-man dental team (dental officer, dental assistant and driver) in a relatively short period of time. An airlock-type penthouse is to be provided to serve as shelter for waiting patients, surgical recovery area, and for reception and administration.

So you see, this will be a Mobile Dental Clinic worthy of the nineteen-eighties — and so it should, since it will roll right into the 21st century!

In the meantime, let's get some more mileage out of old faithful, THE VAN, or, as we insiders affectionately call it, ECC 124710 Truck, Van, Shop, 2½ Ton, 6 x 6 Dual Tandem M220 Cdn, w/Dental Operating Clinic Equipment.

He had a tooth removed in Dublin.  
Now he claims to be of Irish  
extraction.



This old war-horse/workhorse, ECC 124 710 Truck, Van, Shop, 2½ Ton, 6 x 6 Dual Tandem M220 Cdn, w/Dental Operating Clinic Equipment, better known as "The Van", is more than ready to be retired. But until its replacement is built, the 27 mobile dental clinics of this type will remain in service with the Canadian Forces from coast to coast and half-way around the world.



# Dental Emergencies and the Physical Education and Recreation Instructor

CAPT D.G. CAHOON, DDS\*



The training of Physical Education and Recreation instructors in dental first aid became the responsibility of Canadian Forces Dental Services School by accident. Two years ago no one could have predicted that each Canadian Forces School of Physical Education and Recreation TQ5 Course would spend a half day at the Dental School viewing slides, attending lectures, touring CFDSS and having mouthguards fabricated.

One morning in July of 1976, a young private presented on sick parade with an abscessed maxillary central incisor. The tooth was so mobile that it could have easily been extracted with the fingers. The patient explained that the previous Thursday he had received an elbow in the face while playing basketball at Canadian Forces School of Physical Education and Recreation and that the tooth had been displaced "at least an inch" into his mouth. There was very little bleeding and after a few minutes the private was not in much pain, so the physical education instructor on hand encouraged him to stay for the class and only bother the dentist if the problem became worse.

The tooth remained mobile and by Tuesday night there was visible swelling. By Wednesday morning the tooth was easily extracted without forceps.

Upon investigating the situation at CFSPER, it became evident that no fault could be assumed by the instructor. No one at that school knew that anything could have been done to preserve the

tooth after the accident. Even the chief instructor said that he would probably have given the same instructions to the student had he been present.

A one hour lecture was arranged in order to instruct the PERI staff on the treatment of traumatic dental injuries. The lecture was so well received that it generated the enthusiasm necessary to have a half-day seminar incorporated into the PERI TQ5 course.

Presently, three CFSPER classes of twenty-five students visit CFDSS each year for a half-day orientation to dental first aid. The course commences with a discussion of teeth and the prevention of traumatic injuries. Various types of mouthguards and face protectors are displayed and their advantages discussed. Impressions are taken for at least four of the students to demonstrate the fabrication of a vinyl thermoplastic mouthguard. The mouthguard table clinic demonstration prepared by the hygienists has been ideal for this instruction. Since the course began, requests for mouthguards have increased.

The intent of the seminar is to teach the students what they can do to prevent or treat traumatic injuries, and to establish a rapport with them. Reinforced oral hygiene instruction helps to increase the students' awareness of the possibility of preserving the natural dentition.

Questions about "screw-in teeth" almost invariably arise, which has led to the discussion of

root canal therapy and post and core procedures. Included is an explanation of the differences between a bridge and a partial denture and some criteria for their use.

It has been gratifying to see how much interest these students have in the subjects presented. More questions are generated than there is time to answer them.

The final hour of the afternoon seminar is devoted specifically to dental emergencies and their first aid treatment. This topic lends itself well to discussion because the students now have some background in dental topics such as the treatment of fractures, abscesses and missing teeth.

The PERI staff are often the first people to become involved with traumatic injuries such as totally evulsed teeth, alveolar fractures, traumatic mobilities, and soft tissue injuries. It is hoped that their afternoon at CFDSS will have made the physical education instructors more aware of their responsibilities toward prevention and first aid treatment of dental injuries. An added benefit is the generation of interest in the role of the CFDSS and in the scope of treatment available from the Canadian Forces Dental Services.

\*Captain Cahoon is a graduate of University of Alberta (1976). He was employed at the CFDS School, CFB Borden, Ont., until this past summer when he was transferred to CFB Penhold where he is now serving.



# Dental Students Train in Borden

Dental students from nine of the ten Canadian Faculties of Dentistry are enrolled in the Dental Officer Training Plan (DOTP). They obtain their professional education under the auspices of the Canadian Forces, and receive part of their military training each summer at Canadian Forces Dental Services School in CFB Borden. For the Phase II and Phase III students, the summer training consists of two parts: one in various dental clinics in Canada and Europe, and the second at the CFDSS. This year the School played host to 16 DOTP candidates.

Although the student's stay in Borden was abbreviated, it remained intensive. During this period the candidates successfully organized and executed a five day field exercise at Camp Ipperwash where they provided preventive and comprehensive dental care for the summer cadets. They also visited other schools in Borden, and toured the Astra Pharmaceuticals laboratory and the CN Tower in Toronto. In addition to these off-Base activities, the DOTP candidates received formal instruction in small arms, Canadian Forces Dental Services organization and procedures, career management and planning, Other Rank trade progressions, and other service knowledge topics.

Their stay in Borden was culminated with a Mess Dinner on the evening of 27 July. The next morning, the candidates participated in a graduation parade, which was reviewed by BGen W.R. Thompson, Director General of Dental Services. Distinguished guests at the mess dinner and parade, in addition to the Director General of Dental Services, were BGen (ret'd) K.M. Baird, Colonel Commandant of the Canadian Forces Dental Services and Dr. D.L. Rife, President of the Canadian Dental Association.



BGen W.R. Thompson accompanied by Maj K.R. Morley, Parade Commander, and 2Lt C.J. Shell, inspects DOTP Phase II and Phase III graduates.



2Lt P.R. Myers ( Dalhousie ) receiving Third Phase Honour Award.



Second Phase Honour Award presented to 2Lt T.A. Routledge ( Toronto ).



At the parade, awards were presented to candidates who had distinguished themselves by their performance. The Phase III honour candidate was 2Lt P. Myers, Dalhousie University, while the Phase II honour candidate was 2Lt T. Routledge, University of Toronto. A field exercise award was also presented to the individual from each Phase who contributed most to the success of the field exercise. This year's winners were 2Lt(W) J. Walton,

University of Alberta in Third Phase, and 2Lt T. Harle, University of Toronto from Second Phase.

The senior students will now return to university to complete their final professional academic year prior to coming to service as full time dental officers in the Canadian Forces Dental Services.

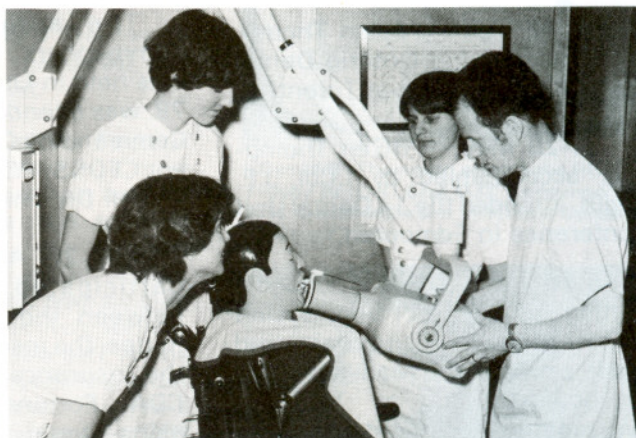
Presentation of the Field Exercise Award to 2Lt T.J. Harle (Toronto) and 2Lt (W) J.N. Walton (Alberta).



## Report on Military Katimavik

*Katimavik is an Inuit word meaning "Meeting Place". It is the name given to a nine month program for youths between the ages of 17 and 22 from all across Canada and with varying backgrounds. It was designed by the Honourable Barney Danson, Minister of National Defence, as an initiative to promote the development of the common goals of human language exchange and travel within the country.*

*Approximately 1,000 individuals were initially recruited, broken into groups of 20 or 30, and placed at different camps across Canada. Every three months, each group moves to a new site where various types of community work are performed.*



CWO R. Matheson demonstrates radiographic technique to the Katimavik girls. Standing in the background: Pte (W) MacDonald (L) and Pte (W) Desrosiers (R) Standing in the foreground: Pte (W) Ferguson and CWO Matheson.

In addition, there is a military option which employs groups through the Canadian Forces for nine months. In this program, one third of the time is spent in basic training; the rest is for trades training and employment.

Miss Carol Ferguson, a candidate undergoing training at CFDS School, gave the following impressions of her involvement with Katimavik:

"In basic training, I discovered that I was not the only person prone to fatigue, everyone shared

the same aches and pains. I realized that the Forces demand a high standard of performance from each participant and that everyone must contribute to team efforts. Basic training weeded out those individuals who were less serious about the program. It was no doubt the most demanding phase of training, but it was also the most rewarding one. An often voiced criticism of the military training is that it tends to "de-characterize". In reality, by standardizing dress, deportment, etc, the organization forces individuals to express their

personality the hard way — for instance in perseverance and attitude".

"Trades training is of the highest quality and provided by excellent instructors. The instruction and experience acquired through the program are improving our changes for future employment and enhancing career opportunities. The efforts of the program will pay off if the participants make Katimavik mean **Kateamavik**".



# Division News

## DG AND STAFF FOLLOW BUSY SCHEDULE

3-5 May 77 — BGen W.R. Thompson, accompanied by LCol H Griesbach, visited the new clinic facilities at Walter Reed Army Medical Center, Washington. While there they met with staff officers of the US Army, Navy and Air Force Dental Corps. The purpose of the visit was primarily to view and discuss new dental clinic accommodation.

11 May — The DGDS travelled to CFB St-Jean to view the new Megaplex; he also visited CMR.

14-17 May — BGen Thompson attended the Ontario Dental Association meeting at Toronto.

24-25 May — BGen Thompson, accompanied by LCol J.F. Begin, attended the 14 Dental Unit Conference in Edmonton.

6-10 Jun — DGDS attended a portion of the 11 Dental Unit Conference in Esquimalt and made a side trip to Madigan Army Medical Centre at Tacoma, Washington, to attend Maj M.S.

Bouris' graduation from the two-year General Dentistry Residency Program.

15 Jun — BGen Thompson attended the opening of the renovated hospital and dental clinic at CFB Bagotville.

19-22 Jun — BGen Thompson inspected dental facilities and interviewed CFDS personnel at CFBs Galetown and Chatham, and participated in the official opening of the renovated clinic at CFB Cornwallis.

## CONFERENCE

The annual DGDS/Unit Commanders' Conference, which was held in Ottawa on 25-27 Apr 78, was attended by all Dental Unit Commanding Officers, Commandant CFDS, PCO/Dent, PCCS/DP and all Division officers.

On 20 Apr 78 LCol Begin participated in negotiations between the CDA/CDSPI Committee, the insurance carriers, and the insurance consultants to the CDA. Fortunately, three major gains were realized for CFDS

dental officers in that certain military exclusions were either cancelled, reduced or redefined in a much more acceptable way.

On 5 and 6 June LCol Begin attended a meeting of the Council on Health Care at CDA headquarters. This Council collects and exchanges data and information and makes recommendations to the Board of Governors pertaining to dental auxiliary training modules, preventive dentistry programs, dental care for the handicapped and for the geriatric patient; it formulates guidelines and advises on third party carrier dental insurance programs and claim forms, on occupational health hazards, fluoridation, radiation protection, etc.

## PHYSICAL FITNESS

The four fittest persons to be found at the Division passed their annual test handily. The best time was recorded by LCol Lanctis (9:15) followed a minute apart by Capt Hatcher (10:15), BGen Thompson (11:15), and LCol Fortier (12:15), the latter making sure he finished behind the DGDS on the advice of his career manager.



Personnel attending DGDS/Commanding Officers' Conference surround guest speaker, LGen J.C. Smith, ADM(Per), (front center).





# 16th Annual CFDS Golf Tournament

*The 1978 version of this annual event took place at CFB Trenton on Friday, 8 September. A total of 77 golfers participated in the tournament, and 84 current and former members attended the presentation banquet.*

*Contrary to the dire predictions of the 1978 edition of the Farmers' Almanac, and other reliable sources, the weatherman cooperated in a most favourable manner. As a result, an extremely pleasant day of golf was enjoyed by all, at least from a standpoint of weather. As usual a high spirit of camaraderie existed throughout the tournament.*

*Special congratulations are extended to the 13 Dental Unit team on their victory, and to Capt Ron McWade and Col Len Pierce for respectively winning the K.M. Baird Trophy (low gross) and the G.R. Covey Trophy (low net). A new prize was introduced this year, for the CFDS member who displayed the greatest amount of initiative and perseverance in attending the tournament. This year's winner was Capt R.J. Leblanc who spent a total of 56 hours travelling from CFB Summerside to CFB Trenton. Capt Leblanc finally arrived in Trenton at 1600 hrs on Friday, 8 September in time for a fast round of golf and the banquet dessert.*

*For those who missed the winners circle and/or the tournament, there is always next year. Please be sure to join us on Friday 7 September 1979 for the next edition of the CFDS Annual Golf Tournament.*



BGen W.R. Thompson present the RCDC (R) Trophy to (L-R) Capt D.O. Lamoureux, Sgt G.R. Lamontagne and MWO D.J. Davies from 13 Dental Unit.



Col (ret'd) G.R. Covey presents the Low Net trophy to Col L.R. Pierce (right).



Capt R.A. McWade receives the Low Gross Trophy from the hands of BGen (ret'd) K.M. Baird.



Col L.R. Pierce present the Low Net former member prize to Mr. J. Harrison.



Col L.R. Pierce present the Low Gross former member prize to Mr J. Clint.





Once again the Barbecue on Thursday, 7 September proved to be one of the tournament highlights, with 108 attendees enjoying a steak and good fellowship.

Une fois de plus, le barbecue du jeudi le 7 septembre s'avéra un des faits saillants du tournoi alors que 108 amateurs de golf et leurs sympathisants se régalerent d'un bon steak et d'une ambiance des plus amicale.



Col Pierce makes a special presentation to BGen (ret'd) K.M. Baird, retiring Colonel Commandant of the CFDS, for the many years of support he provided to the CFDS Golf Tournament.

Le Col Pierce fait une présentation spéciale au Bgen (retraité) K.M. Baird qui se retire comme Colonel Commandant du SDFC, pour ses nombreuses années de support du Tournoi de Golf du SDFC.



"And who said Drinking and "Driving" don't mix."

"Et qui dit que la bonne conduite et la boisson ne vont pas de paire."



Three cheers for the "workers" Trois hurras pour les "travailleurs"

#### "A" FLIGHT

##### LOW GROSS

Capt D.O. Lamoureux  
MWO D.J. Davies  
Maj J.F.A. Marcil  
CWO R.E. Todd  
WO G.M. Anderson  
Cpl R.L. Solomon  
CWO (ret'd) T.L. Batten

##### LOW NET

Maj M.W. Freedman  
Maj J.A.G. Boulanger  
Sgt G.R. Lamontagne  
Maj (ret'd) M. Fisk  
Cpl S. Gignac  
LCol (ret'd) A. Andrews  
Col J.N. Wright

#### GROUPE "A"

##### COMPTÉ TOTAL

Capt D.O. Lamoureux  
Adjm D.J. Davies  
Maj J.F.A. Marcil  
Adjc R.E. Todd  
Adj G.M. Anderson  
Cpl R.L. Solomon  
Adjc (retraité) T.L. Batten

##### COMPTÉ NET

Maj M.W. Freedman  
Maj J.A.G. Boulanger  
Sgt G.R. Lamontagne  
Maj (retraité) M. Fisk  
Cpl S. Gignac  
LCol (retraité) A. Andrews  
Col J.N. Wright

Closest to the Hole — WO G'M' Anderson  
Longest Drive — LCol H.J. Marion  
Most Honest Golfer — Sgt M. St.Pierre

Le plus près du trou — Adj G.M. Anderson  
Le plus long coup — Lcol H.J. Marion  
Le plus honnête — Sgt M. St.Pierre

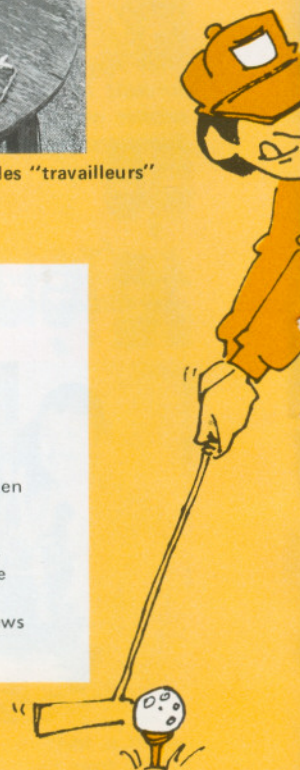
#### "B" F

##### LOW G

Mr F  
Capt F  
WO F  
Col F  
LCol F  
BGen F  
Cpl F

##### LOW N

Maj F  
Capt F  
Capt F  
WO F  
Capt F  
Maj F  
Capt F





## FLIGHT

### GROSS

M. Letourneau  
M. Hockney  
N. Audet  
S. MacDougall  
J.J. Marion  
(ret'd) K.M. Baird  
R. Bernier

### NET

H.M. Amos  
R.G. Button  
K.V. MacDonald  
R.S. Black  
G.E. Tucker  
B.D. Hamilton  
R.J. MacDonald

## GROUPE "B"

### COMPTE TOTAL

M. P. Letourneau  
Capt M. Hockney  
Adj N. Audet  
Col G. MacDougall  
Lcol H.J. Marion  
Bgen (retraité) K.M. Baird  
Cpl R. Bernier

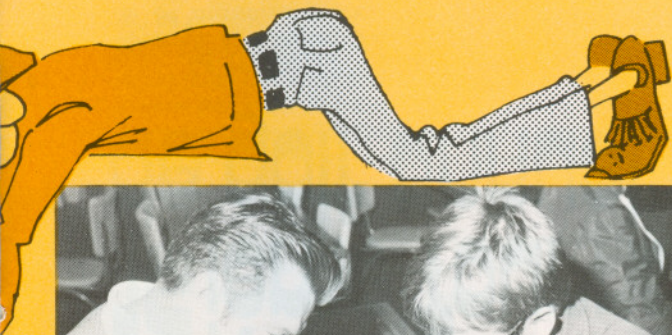
### COMPTE NET

Maj H.M. Amos  
Capt R.G. Button  
Capt K.V. MacDonald  
Adj R.S. Black  
Capt G.E. Tucker  
Maj B.D. Hamilton  
Capt R.J. MacDonald



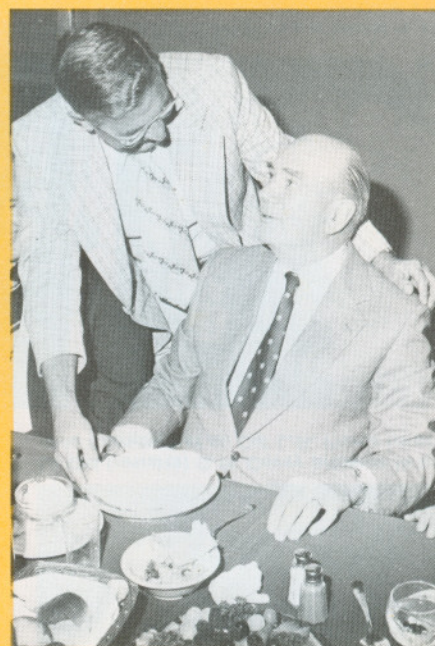
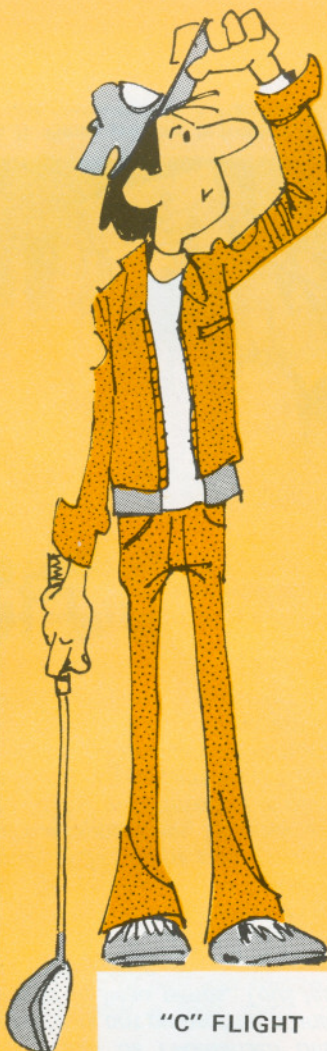
The "Un-Cola" generation!

La génération "In-Cola"



"No! No! On your 'monthly returns' you add a few; on this card you subtract."

"Non! Non! Sur tes 'rapports mensuels' tu en ajoute, sur cette carte tu soustrais."



Special Presentation of a Pumpkin Pie to Col (ret'd) C.M. Cornish by col L.R. Pierce for unswerving devotion to a low calorie diet over a great many years.

Présentation spéciale d'une tarte à la citrouille au Col (retraité) C.M. Cornish par le Col L.R. Pierce pour sa participation assidue à une diète stricte durant de très nombreuses années.

## "C" FLIGHT

### LOW GROSS

Maj K.R. Morley  
LCol V.J. Lanctis  
Capt J.G. Langlois  
Cpl R. Anctil  
LCol E.F.A. Foley  
CWO R.F. Matheson  
BGen W.R. Thompson

### LOW NET

Maj W.A. Gray  
Maj W.R. Wiseman  
Maj R.L. Crosthwait  
Capt C.R. Mensinga  
MWO G.N. Fathers  
WO J.G. Hughes  
Sgt R.N. Orr

## GROUPE "C"

### COMPTE TOTAL

Maj K.R. Morley  
LCol V.J. Lanctis  
Capt J.G. Langlois  
Cpl R. Anctil  
LCol E.F.A. Foley  
Adj R.F. Matheson  
Bgen W.R. Thompson

### COMPTE NET

Maj W.A. Gray  
Maj W.R. Wiseman  
Maj R.L. Crosthwait  
Capt C.R. Mensinga  
Adj G.N. Fathers  
Adj J.G. Hughes  
Sgt R.N. Orr



Old soldiers never die... they just go to pot (with apologies to Charlie Loken, Andy Andrews and Chuck Sivell).

Qui a dit qu'après la retraite viennent les années maigres! (nos excuses à Charlie Loken, Andy Andrews et Chuck Sivell).