

BRITISH FORCES CASUALTIES NORTHERN IRELAND

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SUMMARY: This paper presents a broad view of the casualties occurring in British servicemen in Northern Ireland over a 4 year period 1 January 1971 to 31 December 1974. It is intended to serve as a backcloth against which more detailed reviews may be presented in the future but incidentally demonstrates the commendable efficiency of the Medical Services in Ulster, both Civil and Military.

The present troubles in Northern Ireland began in the autumn of 1969 with a series of large and alarming civil riots and the rumblings of organised terrorist activity. The small permanent troop garrisons stationed in the Province were augmented steadily in pace with the need to contain the mounting incidence of violence throughout the remainder of 1969 and in 1970. There were many injuries to British soldiers during these years but they were largely occasioned by bricks and stones or bottles hurled by rioting mobs and there were few really serious injuries. Indeed until the end of December 1970 there were only 110 soldiers who required admission to hospital for an injury sustained on internal security duties and there were no deaths at all from that cause.

The shooting and bombing campaign began in earnest in 1971. Only then did serious injury and death start to occur. In December 1974 the Provisional IRA announced a cease-fire and since then until the time of writing military casualties have been few. For these reasons the present broad review of the casualties in British Forces in Northern Ireland is confined to the four year period 1 January 1971 to 31 December 1974. The available data have been processed in a fairly limited way and a few conclusions have been drawn but the facts and figures are recorded in the hope that they may formulate a useful background for further studies in the future. The figures have been obtained from a personal survey of actual case notes carried out on a number of occasions in the Military Wing of Musgrave Park Hospital and thus inaccuracies have been eliminated as far as possible.

In any consideration of British Forces casualties in Northern Ireland it should not be forgotten that a very large number were afforded their early treatment in Civil hospitals. Almost every hospital in the Province has been involved at some stage but particularly noteworthy, largely because of their proximity to the main areas of turbulence, are the Royal Victoria Hospital, Belfast and the Altnagelvin Hospital, Londonderry. The civil hospitals have on some occasions been called on to give initial surgical aid prior to evacuation but on others have undertaken the often heavy load of ongoing surgical care, particularly in cases calling for the special expertise in management available in the intensive care units for respiratory and neurological problems. The Military Wing at Musgrave Park Hospital was augmented in 1971 by the addition of considerable extra staff and equipment. Almost all casualties have been admitted there at some stage. Overall around 30 per cent have had all their treatment at the Wing. The remainder have been treated for varying periods in civil hospitals prior to admission there. It would

not have been possible, throughout the period, to continue satisfactory working in the Military Wing without the expert evacuation service, both in and out, provided by the Royal Air Force (R.A.F.).

Table I shows the overall casualty figures in British Forces only during the four year

Table I
British forces casualties for the period 1971 to 1974

Total casualties	Wounded	Dead	Gross mortality (percentage)
1357	1121	236	17.4

period under review which came to the notice of the Army Medical Services (A.M.S.) by reason of hospital admission or death. In addition during that time 105 casualties in the Ulster Defence Regiments (U.D.R.) were notified and of these 58 were deaths and only 47 wounded. It is possible that many more were wounded but not notified to the A.M.S. However it is much more likely that the disproportionate number of deaths is accounted for by the fact that a considerable number of the dead were assassinated or murdered when off duty and those would not ordinarily be included in a review of military casualties. For these reasons the casualties occurring in U.D.R. troops have been excluded from this review which deals with the casualties occurring in British Forces only. Amongst these, and included in the overall totals, are 2 wounded and 24 deaths not directly attributable to injuries sustained on duty in security operations (Table VIII).

Figure I shows the distribution of deaths over the period. The number rose fairly

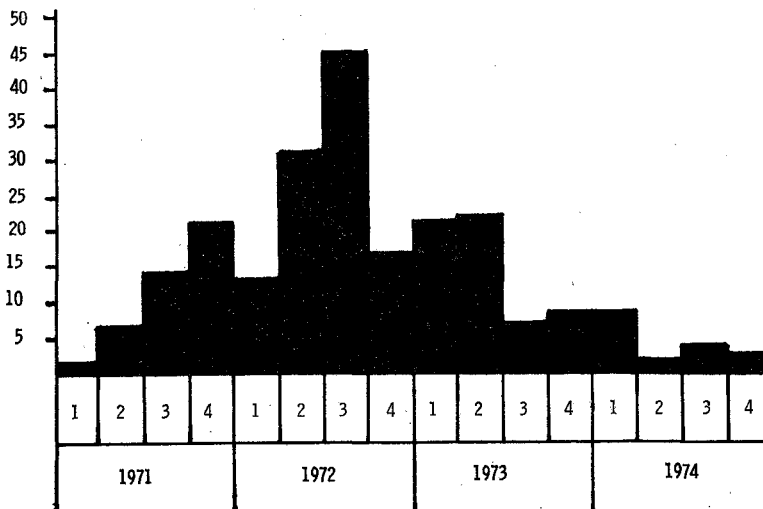


Fig. 1. British forces casualties 1971 to 1974. Three monthly periods.

steadily until the third quarter of 1972 after which there was a sharp decrease probably in part at least due to the success of "Operation Motorman" when the "No-go"

areas of Belfast and Londonderry were reoccupied and brought under surveillance by the Security Forces.

Table II shows the distribution of deaths by cause. It will be seen that of the 236

Table II
British forces casualties for the period 1971 to 1974
Cause of deaths

Cause	Number	Total	Percentage
Explosive device	81	223	36.3
Bullet	135		60.5
Road traffic accident on duty	7		3.2
Road traffic accident off duty	9	13	
Others	4		

deaths 13 were judged to be not attributable to internal security duties in Northern Ireland and incidental in the sense that they could as easily have occurred in England or Germany or other places. Nine were due to road accidents quite unconnected with duty journeys and 4 were from natural causes. About one third of the total deaths were due to explosive devices of all types. These included Booby Traps, Car Bombs, Land Mines, and a variety of others but so far it has not been possible to determine the proportion of deaths due to each type. Almost two thirds of the total dead were killed by bullets and this reflects the tactics employed for a good deal of the time in this particular campaign. Sniping at foot patrols or sharpshooting at soldiers drawn into an ambush "riot" has resulted in much death and injury. The proportion of those deaths due to injury with high velocity missiles is not known for certain but undoubtedly a large number of them were so caused.

Table III shows that the mortality from explosive devices was a little higher than

Table III
British forces casualties for the period 1971 to 1974
Overall mortality by weapon

Weapon	Wounded	Dead	Percentage
Explosive device	262	81	23.6
Bullet	567	127	18.2

from bullet injury. Bullet hits accounted for 50.6 per cent of all casualties (694 of 1357) and 60.5 per cent of the deaths (135 of 223). Explosive devices caused 25 per cent of all casualties (343 of 1357) and 36.3 per cent of all deaths (81 of 223). Many of those who died as a result of an explosion were injured at very close quarters and sustained an injury immediately incompatible with life. Some bodies were recovered in pieces from a widely scattered area. Further study of this whole group will be worth while because of the number of incidents where men were wounded in proximity to others who were

killed. In some of these incidents the amount and type of explosive is fairly accurately known, together with the distances involved and it may be possible to add to our knowledge on the observed effects of blast. Since, however, some of the explosives involved were of the "home-made" type employing fertilizer and other available chemical agents the value of such information as may be gained could be somewhat limited.

Table IV shows the proportion of wounded according to cause. The miscellaneous

Table IV

British forces casualties for the period 1971 to 1974
Cause of wound

Cause	Number wounded	Percentage
Explosive device	262	23.3
Bullet	567	50.6
Miscellaneous	292	26.1

causes include those from riot and road accident associated with riot or terrorist activity. Attention is again drawn to the high number wounded by bullets.

Tables V, VI and VII all refer to bullet hits. It should be noted that the figures for

Table V

British forces casualties for the period 1971 to 1974
Mortality bullet wounds by region

Region	Wounded	Dead	Percentage mortality
Head	41	46	53
Neck	24	12	33
Chest	70	48	47
Abdomen	43	20	32
Limbs	389	1	.26

Table VI

British forces casualties for the period 1971 to 1974
Combined percentage mortality bullet wounds by region

Region	Wounded	Dead	Percentage
Head and neck	65	58	47.1
Head, neck and chest	135	106	44.0
Head, neck, chest and abdomen	178	126	41.4
Chest and abdomen (Trunk)	113	68	37.6
All regions	567	127	18.2

Table VII
British forces casualties for the period 1971 to 1974
Region hit and target area (bullets only)

Region	Total casualties	Percentage of total	Percentage of body area
Head and neck	123	17.7	12
Chest	118	17.0	16
Abdomen	63	9.1	11
Limbs	390	56.2	61

dead included all deaths and do not distinguish between those killed-in-action and those who died of wounds. The high mortality in association with head and truncal injury is in accordance with expectation based on past wars and campaigns. The mortality associated with bullet wounds of the limbs is very low. The implications in respect of head and body armour are clear, although it is not suggested that such forms of protection will defeat high velocity bullets. Table VII shows the effect of accurate aimed rifle fire in that 17.7 per cent of bullet hits were in the head and neck which represent only 12 per cent of body area although some of the discrepancy is accounted for otherwise as described below.

The figures shown in Table VIII demonstrate to some extent in a numerical way the

Table VIII
British forces casualties for the period 1971 to 1974
On duty casualties

Casualty	Number	Percentage	Ratio
Total	1331		
Wounded	1119		
Dead	212		
Overall mortality		16	
Brought in dead	148		
Died of wounds	64		
Percentage died of wounds		5.7	
Ratio Killed in action/admitted wounded			1:9
Overall survival		84	

efficiency of the medical services afforded the British serviceman in Northern Ireland.

As previously pointed out there were 2 wounded and 24 deaths not directly attributable to injuries sustained on duty in security operations. 13 deaths were incidental (Table II) and a further 11 deaths occurred in soldiers who were off duty and who were

murdered, usually by shooting in the head, and left in some remote place. These 24 deaths may legitimately be excluded from an assessment of security operation mortality figures looked at in terms of medical efficiency. One hundred and forty-eight casualties were dead before arrival at any medical aid (BID) and 1183 were admitted wounded. Thus 9 men were admitted wounded for every one who was dead prior to medical aid. This ratio is higher than for any other recorded campaign (Korea 1:3, Vietnam 1:4.15) and means that many of those admitted had sustained injuries which would have resulted in death in other campaigns. In spite of this only 64 died of wounds and thus the mortality of the wounded was 5.7 per cent. In comparison with other campaigns this might appear to be high (World War II 4.5 per cent; Vietnam 2.1 per cent) but for the reasons explained above it is in fact commendably low. The overall survival figure of 84 per cent is extremely high and reflects great credit on all those concerned with the management of casualties.

It should be pointed out again that the Army owes an inestimable debt to the Civilian Medical Services in Northern Ireland. Not only to doctors and nurses but to all workers in hospitals throughout the Province and to the Police, Fire and Ambulance Services all of whom gave of their best at a time when they were sorely tried in other directions. Those members of the Army Medical Services and the Royal Air Force Medical Evacuation teams, who served in Ulster can reasonably feel content with their efforts in support of the British Forces in a difficult situation.

Queen's Honorary Surgeon

Colonel (Acting Brigadier) C. D. Sanders, L.M.S.S.A., D.A., F.F.A.R.C.S., late R.A.M.C. is appointed Honorary Surgeon to The Queen, with effect from 26 September 1975, in succession to Major-General J. Irvine, O.B.E., Ch.B., p.s.c.

COLONEL COMMANDANT R.A.M.C.

Major-General T. W. Carrick, O.B.E., M.B., Ch.B., F.F.C.M., D.P.H., D.I.H., late Royal Army Medical Corps, has been appointed a Colonel Commandant R.A.M.C., with effect from 19 July 1975.

OPERATION PINAFORE

THE "CLARA MAERSK" EPISODE. HONG KONG MAY 1975

Major M. A. TAGGART, S.R.N., S.C.M., Q.A.R.A.N.C.

British Military Hospital, Hong Kong

ON Friday evening 2nd May 1975 it was reported over the radio that the Danish vessel "Clara Maersk" had rescued over 3,000 Vietnamese refugees from a sinking ship and was believed to be resuming her journey to her original destination which was Hong Kong, where she was due to arrive on the evening of Sunday 4th May.

Just before mid'day on Saturday, British Military Hospital (B.M.H.), Hong Kong was warned that it was to be the receiving hospital for the survivors requiring medical treatment. Orders were sent to all B.M.H. staff placing them on standby from noon on Sunday. H.M.S. Chichester, the Hong Kong guard ship, sailed at 14.30 hours with two Royal Navy medical teams and a supply of food to meet the "Clara Maersk" and assess the situation. A briefing was held in B.M.H. at 16.00 hours on Saturday, at which it was revealed that refugees of an unspecified number and state of health were to be received in Hong Kong, those in need of immediate treatment being sent to the B.M.H. and the remainder being processed through the, as yet, unopened Princess Margaret Hospital at Lai Chi Kok as a reception centre. Thence those fit enough to travel onwards were to be allocated to three outlying camps—at Sai Kung, Sek Kong and Dodswell Ridge respectively.

A set-up of eleven triage teams was organised from B.M.H. staff, to be under the leadership of the Consultant Surgeon and his immediate deputy the Consultant Dental Surgeon, leaving the senior physicians free. Each team was to consist of a medical officer (as team leader), a nurse (S.R.N. or S.E.N.) and a medical assistant. Triage teams were allocated as follows:—

One to the wharfside at Kwai Chung, two more following later in the event, where the "Clara Maersk" was thought to have applied for a berth (the Maersk Line dock adjacent to Ocean Terminal being unsuitable at this time due to the imminent arrival of Her Majesty The Queen on her visit to the Colony)—one to the Princess Margaret Hospital at Lai Chi Kok—and four to Casualty at B.M.H. The remaining teams were to be held in reserve as relief teams.

The meeting was informed by the Deputy Director of Medical Services (D.D.M.S.) as Chairman that this was in essence to be a civilian exercise but with considerable military assistance as initial back-up and support to augment—by their request—the limited resources of the civil authorities to cope with a refugee influx. The plan at present was that H.M.S. Chichester was due to rendezvous with the "Clara Maersk" at approximately 06.00 hours Sunday morning, when she would be able to signal back more definite information as to the numbers and condition of the refugees. An estimate of potential patients had been put at 200, including 3 or 4 newborn babies and cases of exhaustion and exposure as the majority of refugees had had to be lying about on deck as best they could, the ship having accommodation for only some thirty persons.

The plan at B.M.H. was for clearance of those wards from which patients might be either discharged from B.M.H. or moved to other wards to allow more empty beds

to be concentrated in certain areas in this emergency. In this way Male Surgical and Medical wards, the Gynaecological ward and the E.N.T./Eye beds on another ward were cleared in the first instance, then the putting up of spare hospital beds and spare ordinary beds would take place, with camp beds being a last resort. The reception of refugee patients was to be at the ambulance bay at the rear of the hospital and then they would be processed through via Casualty, where the triage teams would carry out assessment and urgent treatment, thence taken to the lifts and dispersed to the wards for continuation of treatment and care. Personnel were to be allocated to man the lifts so that one lift was always available at ground floor level should an emergency arise. As far as possible it was hoped that patients only would be admitted, but in the event it proved not only impossible but inhuman to try to separate families that had managed to remain together through such an ordeal. Documentation was to be along the lines and principle of Field Documentation, with changes to usual In-Patient Documentation once patients were settled into their wards.

A platoon of the nearby Royal Hampshire Regiment was to be attached to B.M.H. for security duties and to help with such tasks as stretcher bearing, their help proving to be invaluable.

Contact between those attending the first conference was to be effected on Sunday by telephoning the B.M.H. Administrative Officer at staggered times between 11.00 to 11.30 hours to confirm whether or not the emergency measures were to proceed, by which time H.M.S. Chichester would have made contact with the ship and firm information should thereafter be available at Headquarters Land Forces.

On the Sunday morning H.M.S. Chichester signalled that the total number of survivors was now estimated to be about 4,420 persons. Details of over twenty of the more serious cases were given; two of these were to be picked up by a Royal Air Force Wessex helicopter as soon as the ship was within range, one patient with diagnosis of acute abdomen, and the other a newborn infant of some two days old with septic penis post circumcision.

During the afternoon arrangements were made within the hospital, for back-up supplies, including mattresses (all sizes), linen, pillows, inco-pads, babies nappies and food supplies (including infant feeds). Last but not least an appeal was made that evening for spare clothing to which there was an overwhelming response from the staff and from many people outside the hospital as well—the Welfare Department soon looked like a clothing bring-and-buy stall as a result. Extra beds were being put up and the Children's ward had a number of extra cots, with a supply of extra mattresses without cots or beds which came into their own within twenty-four hours.

Duty rosters were arranged for the nursing staff, so that all nursing members of the eleven triage teams were replaced on their respective wards. Arrangements for this deployment of staff were facilitated by the typhoon emergency expedient of automatic stoppage of days off, nights off and local leave until the situation settled and "Stand Down" could be approved. During the emergency everyone worked as work was available and several of the staff returned to work after a short rest while the acute phase was in progress. All personnel were instructed to report to Reception at 19.00 hours Sunday for a short briefing on the situation as a whole.

A final conference was convened in the early evening of Sunday at which the D.D.M.S. informed those attending that it was expected the "Clara Maersk" would now dock at approximately 20.00 hours and that figures of expected admissions ranged from 26 to 130 and that the original plan of expecting 180 would be adhered to in these circumstances. There was only one gangway in use on the ship, the second having been smashed during the transfer at sea, so that one triage team (with back-up if needed) would be sufficient at the dockside and one to be at the Princess Margaret Hospital Lai Chi Kok as planned—both teams to leave at 18.30 hours from B.M.H. having finally checked out their equipment.

The D.D.M.S. said that he planned to go first to Princess Margaret Hospital Lai Chi Kok and thence to Sea-Land No. 3 Wharf Kwai Chung to await the ship's arrival and would thereafter be in radio contact with B.M.H. and Lai Chi Kok and with the three outlying camps, so that an overall picture of the entire operation would be available at any given time. Those attending the Meeting were told that the code-name of this situation was to be "Operation Pinafore"—which did afford a moment of light relief.

The wharfside situation was to be in the charge of a Police Senior Superintendent as that part of the operation was an entirely civilian operation under the aegis of the Hong Kong Government, where the refugees would be medically processed by Hong Kong Government doctors, passed to the B.M.H. triage team if admission deemed necessary and administratively processed by the appropriate Hong Kong Government Immigration and Health Authorities. Initially, all those accompanying patients to B.M.H. were to be taken to the Welfare Department once assurance had been accepted of their relatives' safety and well-being. This scheme only partially worked out due to the extreme anxiety of these people—"accompaniers" wanted to remain that way and thus it happened that lodgers were accepted into the hospital.

At last the "Clara Maersk" docked—taking all forecasters by surprise by coming into harbour at 19.30 hours—and at 19.55 hours the first four ambulances arrived at B.M.H. These contained patients suffering mainly from exposure, dehydration and exhaustion—also two newborn babies with their mothers and one lady in advanced pregnancy who gave birth in B.M.H. afterwards. It was known from H.M.S. Chichester that the refugees had formed their own "Committee of Ten" and that there was organisation among them for priorities of casualties to be disembarked, so those known to require hospital treatment were the first patients to be disembarked. The triage teams at the wharfside were kept busy and did not realise, until told about it, that tenacious Press and television men had climbed up on top of huge containers placed as protection walls and were avidly filming the whole scene.

By midnight on Sunday 4th May, 50 refugee patients had been admitted and by 09.00 hours on Sunday 5th May a total of 100 refugees had been accepted into B.M.H. as patients and 41 as lodgers with relatives who were patients. The majority of these admissions and lodgers had arrived between 20.00 hours on Sunday night and 02.30 hours on Monday morning. The highest total of Vietnamese refugees was noted by midnight on Thursday 8th May, at which time there were 159 refugees in the hospital of whom 119 were patients. This influx of lodgers gave B.M.H. rather a problem of accommodation at one point. The problem was, however, solved by accommodating families (mothers and children) in the gymnasium of the Physiotherapy Department;

unaccompanied or single women (mothers with ill babies as patients and sisters of patients) in the Handicraft Room and unaccompanied or single men (fathers of ill children, husbands or brothers of women patients) in the Games Area—both the latter on the 15th floor of B.M.H. within the welfare department complex. The extra movement of beds and camp beds entailed in this arrangement was willingly carried out by two further volunteer groups from the Royal Hampshire Regiment.

Feeding difficulties for the lodgers were mainly those of location and timing, once dietary problems had been sorted out by the ever-helpful catering staff, which were resolved by having the mealtimes for all lodgers at the same time as the patients on the wards—but served on the 15th floor in the Up-Patients Dining Room. This solution took some of the load off the ward staff as it did permit a reduction in numbers on the wards at these busy times.

Infant feeds were made up in the Milk Kitchen of the Maternity Unit for 24-hour periods at a time for those wards and areas needing them—such as Children's ward, Isolation ward, the Physiotherapy Department lodgers and the Maternity Unit itself. This proved to be an excellent scheme as it enabled the Children's and Isolation wards to concentrate their staff on nursing care without the commitment of making up infant feeds. This measure was also useful in that it gave the staff of the Maternity Unit a chance to participate in the overall activity—on one occasion in the early morning hours even providing a churn of made-up feeds in a hurry for collection by helicopter for one of the outlying camps.

The wide variety of conditions and of ages of the patients was of considerable professional interest, the latter varying from newborn babes to those people in their eighties and nineties—one of whom was a ninety-six year old blind man. It never ceased to amaze us how all had survived not only the hazardous journey from their homes in Vietnam to the sinking of their first refugee vessel, but also the perilous transfer from it to the larger "Clara Maersk": one crewman later remarked that it was fortunate that the weather was fair and the sea tolerably calm.

Language was a very real problem but, luckily, many of the patients spoke or understood French and some of the others spoke a little English. By dint of linguistic experiment, therefore, a valuable rapport was soon established and those refugees who were able to understand what was being said most willingly translated at all times of day and night for those unable to understand.

As had been suspected most of the patients were suffering from sheer exhaustion, apart from their other conditions which included bilateral conjunctivitis (several cases—some involving whole families), measles, a mild typhoid case, several cases of dysentery and gastro-enteritis, a number of patients with diarrhoea and vomiting and an old lady with hemiparesis from a previous cerebrovascular accident. The surgical conditions included a patient with acute appendicitis (perforation had occurred on 30th April) this was the urgent case evacuated by helicopter from the ship direct to B.M.H. on Sunday afternoon for operation; several patients with injuries incurred during the transfer from one ship to another including traumatic amputation third finger left hand; traumatic amputation 3rd, 4th and 5th fingers of left hand (this patient a female); fractured ribs; laceration upper right thigh; fractured sternum; bilateral fractured ankles; infected laceration left tibial area; traumatic amputation little toe right foot; and bilateral fractured os calcis. Some of their injuries were sustained from falling suitcases, one by

a falling iron bar and the thigh laceration was due to the patient being momentarily trapped during his transfer between vessels.

As far as could be ascertained not one refugee had been lost in the transfer from one vessel to another—a wonderful feat in itself—but the sorting out and identifying of patients and the tracing of their families or, as in the sad cases of several refugees, which ones were entirely alone or apparently orphaned, constituted a very difficult task. Towards its solution an “Identification Ops Room” was set up in the B.M.H. Conference Room by a team led by the Administrative Officer, consisting of staff from Medical Records Office and clerical staff, which did an interesting job of personnel location. The Hong Kong Government Health and Immigration Authorities had access to those refugees in the hospital and, with the help of several interpreters from various external sources, were able to provide some form of Identification and Authority for Immigration papers for the refugees. Slowly a pattern began to emerge and on Saturday 10th May, 45 Vietnamese left B.M.H. to disperse to the three outlying camps to rejoin relatives or friends or on an allocation basis. They went in two buses and one minibus provided by the Army, with nursing escorts from B.M.H., to Sai Kung (an unforeseen problem arose here as some thought they were being repatriated to Saigon because the words are the same in Vietnamese characters and they required firm reassurances on this point), to Sek Kong and to Dodswell Ridge in the New Territories. During the following week further departures took place and by the next Saturday 17th May, 99 refugees had left the B.M.H. On 13/14th May the lodgers had moved out of the Physio-



Fig. 1. Taken at Dodswell Ridge—one family that had made it to the end of the line complete as far as was known: but the memories of their journey will always be with them, as the father's still gaunt and strained expression reveals.

therapy Department gymnasium and the Welfare Department as their numbers had diminished and the remainder were accommodated at one end of the Gynaecological and Male Medical Wards respectively, catering arrangements for them continued as before on the 15th floor.

During the first week the B.M.H. had been visited by the Commander British Forces, Lieutenant-General Sir Edwin Bramall, accompanied by Lady Bramall, on Wednesday 7th May. A small "Aftermath" conference on the 8th May was chaired by the D.D.M.S. to discuss the whole of Operation Pinafore, to clarify any points arising and to assess the overall effectiveness of the scheme. The numbers of refugees continued to decrease as more were recovering and dispersing to the camps and at the time of writing, 30th May, only five remained in B.M.H.

For those on the nursing side this had been a memorable experience in many ways—not least in that it was a first encounter for most people with refugees and the attendant problems of family identification. There were numbers of stories and impressions, of course, as everyone had their own to recount but the following extracts may help to give an idea of the general situation.

"In Casualty a tearful young woman acting as interpreter as she tried not to think too much of her two young children who had been unable to get out of Saigon and had remained there.

On the Children's ward that Monday morning a scene reminiscent of wartime as forty-four little patients were being nursed on the ward and, when cots and baby cribs ran out, mattresses were brought into service—and still the ward Sister and her staff worked on serenely as if this was a common occurrence.

Again, on Children's ward (where those off-duty and those not required elsewhere congregated like avid foster-mothers at feed-times), a neat move by one Sister twitched a precious new nappy from under another's nose amidst their mutual laughter.

The scene in the gymnasium as an officer and men of the Royal Hampshire Regiment (all volunteers) put up camp beds as a team of off-duty Sisters prepared the room as best they could to provide all "mod Cons" for mothers and children down to disposable nappies and paper towels, then went to the various wards to collect their charges and settle them down.

A lasting impression of one young soldier looking on in embarrassed wonderment as a young mother fed her new baby while she was being moved—bed and all—to another ward, by way of the hospital lift.

In Reception the lone figure of a little boy—name and age then unknown but looking about six years old—unidentified and unable to communicate (and everyone tried: from Vietnamese/French speakers to the official interpreters) but there was nobody who could reach him, so stunned was he by the events of the preceding few days. This story does have a happier ending—he was re-united with his delighted mother out at Dodswell Ridge, but even then he was still a dazed and anxious little boy.

The scene one night on one of the male wards when lodgers had been moved out from the 15th floor and had been given bunk-bed accommodation. One lodger from a lower bunk left it to go to the toilet—his companion in the upper bunk woke up and,

finding a vacancy, promptly got into the lower bunk. The returning man was most indignant to find his bed firmly occupied and order had to be restored by the night staff and his other companions. Apparently this was an oft-repeated episode and caused much amusement—not least to the night staff, as long as it did not occur too late at night.

On another male ward, the wonderful face of the oldest refugee who was ninety-six years of age and blind, with a face like an etching and still clutching a superbly carved heavy stick—how had he survived such a journey? A clue was given to us when he departed from B.M.H., as he was dressed in white flowing robes with a small white head-dress, still holding his stick—could he have been helped to get away because he was the village headman or some kind of priest?—one wondered ”.

Some of the refugees were good artists and several drawings were given to various members of the staff in touching gratitude before they left B.M.H.

One of the two lasting memories of many people who saw such scenes on that Sunday night and Monday morning seems to be the absolute destitution and complete exhaustion of the refugees, most of whom had fled wearing only what they arrived in at B.M.H. many days after their original departure and all that they wanted was somewhere to sleep in safety and peace. Their exhaustion was beginning to resolve after about two or three days in most instances, but regular food and yet more sleep was all they asked.

The other memory was of the pathetic sight of the children, from a few hours old up to the eleven and twelve year olds, most of the latter just sitting in Reception with faces showing a dazed resignation—and stolidly refusing to be parted from their accompanying adults—others crying and some just sitting stunned, as they waited apathetically for the next event in their torn lives.

At the end of a fortnight most of our refugees had departed to the three camps, the organisation of which had by then been taken over by the Hong Kong Government Authorities. Some were to find new homes in other countries including Canada, France, America and Britain, especially if they were more easily employable such as those with extensive clerical experience or artisans. Others would have to wait a while—unless experts in their fields, like the genetics professor. The very young were a burden on their families from the point of view of resettlement in other countries because, from the purely economic angle, such families would have to be subsidised in some form for several years before the youngest members were trained and earning their own livings. Unfortunately the old and the infirm were, as always in the aftermath of any war, unplaceable and unemployable but the family and community feeling of these people had, on the whole, been proved to be so strong that one could only hope that all would be reasonably well for them.

The “Clara Maersk ” episode, as it came to be known, was an eye-opener for us all—not only from the hospital side of things as to how contingencies were or were not catered for, what could have been better planned, what part of Operation Pinafore went smoothly—but for the fearful situation in which these people had found themselves and, in so doing, had given us a glimpse of the homeless way of life of any refugee, of the irrevocable displacement of the family unit (total in some cases) and of the prospect of the unknown effect upon the younger refugees.

OPERATION PINAFORE

Major I. M. M. BAGSHAW

M.B., Ch.B., M.R.C.G.P., D.(Obst.) R.C.O.G., D.C.H., R.A.M.C.

Warrant Officer 2 "TAFFY" MONGER, R.A.M.C.

18 Field Ambulance, R.A.M.C., Hong Kong

THIS was no well thought out exercise with mock casualties, this was the real thing with real people and a true life situation in which 18 Field Ambulance, R.A.M.C. certainly proved that it was fit for role.

On Sunday 4th May 1975 our Commanding Officer was invited to a briefing with the Brigade Commander at which he was told that a Danish Freighter had picked up 4,420 South Vietnamese refugees from a sinking ship in the South China sea. The freighter was steaming for Hong Kong where it was expected to arrive at 21.00 hours that day. Basically the Army was tasked to house and look after the welfare of these unfortunate people.

Two thousand refugees were to be housed in hurriedly erected 160 lb tents beside the Sek Kong airstrip, 1,500 were to be housed in an Army camp at Dodswell Ridge and another 750 were to go to another Army camp at Sai Kung. The medical care of all the people at Sek Kong and Dodswell Ridge and also the hygiene aspects of both camps was the responsibility of 18 Field Ambulance, R.A.M.C. The biggest problems arose at Sek Kong where the refugees were totally housed in a tented camp and where all facilities had to be brought into the camp.

By 20.00 hours on Sunday 4th May 1975, we were ready to receive our first patients in a modified Advance Dressing Stations (A.D.S.). An 'F' assembly was erected and equipped in such a manner as to allow two doctors to see patients at all times. Six 160 lb tents were pitched as isolation tents, one for infectious diseases, such as, measles, mumps etc., one for adults with diarrhoea, two for children with diarrhoea and their parents and two were kept for any emergency situation that might arise. Eight stretchers were placed in each tent to act as beds. Water was obtained from a unit water trailer and electricity which powered a refrigerator as well as lighting our area and powering electric fans was produced from our unit's own generator.

Our field hygiene team was extremely active supervising the construction of deep trench latrines, ensuring the hygiene of the washing areas and carrying out extensive swing fogging of the total site area. Malaria was a potential problem here, there has been no malaria in Hong Kong for seven years but there are anophelene mosquitoes and who knows who might be carrying malaria? Water samples were tested and submitted to a government laboratory for further investigation (Fig. 1).

At Dodswell Ridge the Medical Aid Post was sited in a small purpose built building and essential equipment from 18 Field Ambulance, R.A.M.C. was supplied to make the post viable. The hygiene team ensured that the latrine areas were fully functional and adequate and also that the hygiene of the camp was of the highest standard.

Both posts were manned by an R.A.M.C. medical officer and two R.A.M.C. medical assistants were attached to each post, the medical assistants worked on 12 hour shifts although most worked extensively into their off duty time. Regimental Medical Assistant's



Fig. 1. Hygiene assistant Sergeant Bob Sowka enjoying a field day after the arrival of the refugees.

were provided by the Gurkha battalions and their assistance was invaluable. A Land Rover ambulance and driver was sited at each post.

Just after midnight on Monday 5th May 1975, the first tired, hungry refugees, men, women and children, the oldest nearly 80 and the youngest just 2 weeks old began to arrive. They had not slept for four nights, their future was uncertain and many of them had lost everything, their homes, their money, their families but certainly not their characters. All night they continued to arrive in Army lorries and by 06.00 hours they were all safely allocated a bed in a tent. The civilian medical authorities had already sorted through these people and channeled the seriously ill off to the British Military Hospital (B.M.H.), Hong Kong, also they had vaccinated everybody against smallpox and immunised everybody against cholera. A few people reported sick immediately on arriving in the camp and from then until two weeks later when the Sek Kong camp closed, the medical post remained open, day and night dealing with numerous illnesses and injuries (Figs. 2 and 3).

The morning of Monday 5th May 1975 was bright, hot and sunny and the Vietnamese refugees got their first clear impression of their new surroundings. Soon a long queue of people stretched from the doors of the medical aid posts and a regular stream of patients moved through to see the doctor and on to be treated.

Our drug supplies came from B.M.H. Hong Kong and the back up provided by this hospital was excellent and reassuring. Expert advice was always quickly and readily available and we were most grateful to our specialist colleagues. In four days we saw



Fig. 2. Major Ian Bagshaw with some young patients.



Fig. 3. C.S.M. "Taffy" Monger with new—and thoughtful—young friends.

720 individual cases at Sek Kong of which forty were isolated in our isolation tents and eight were admitted directly to B.M.H. Hong Kong. In the first 24 hours we referred a suspected paratyphoid and two suspected cases of tuberculosis to B.M.H. Hong Kong. At Dodswell Ridge 400 patients were seen in the first 4 days and 4 of these were admitted to hospital.

Later on 5th May, mains electricity was fed into our A.D.S. and a telephone was installed at Sek Kong. Sek Kong 7405 was the number for our well functioning A.D.S. It was of interest that the electricity for the whole camp was provided from one 15 amp socket in our Chief Clerks office. we hope that he was not billed for it!

On Tuesday 6th May 1975 the civilian health authorities arrived and recommended that our beautiful deep trench latrines should be replaced by bucket latrines. We bowed to their request but it is worthy of note that we were back to deep trench latrines before a week had passed.

Thursday 8th May was noteworthy as that was the day that the Vietnamese doctors amongst our refugees started to help us run our clinics. Their help was invaluable and they were soon able to aid us considerably with diagnosis and treatment. We even managed to find a dental surgery in the Medical Reception Station (M.R.S.) where a Vietnamese dentist extracted carious teeth from swollen Vietnamese mouths. The first dental treatment that some of the Vietnamese had received for several months.

Saturday 10th May 1975—the monsoons arrived and soon the Sek Kong area was under water, the site was poorly drained and duck boards were soon strategically placed to protect the medical officer's shoes! We always knew who had been on duty by a quick glance at their shoes.

For a further week we continued to function adequately with the aid of the Vietnamese doctors until Monday 19th May when the Government decided to move the refugees to more permanent and drier quarters. We had become very attached to these people and their welfare and we were sad to see them go.

One of our main duties was ensuring that babies and children received adequate nutrition and we approached this by setting up our milk kitchen of which we are justly proud. Twice daily our volunteer helpers under the eagle eye of a S.S.A.F.A. sister and with the assistance of the M.R.S. staff, prepared properly sterilised bottles of milk from milk power for 100 babies under the age of 12 months. Also they produced milk for 250 children under the age of 6 years which they served from large urns to the hungry youngsters. This twice daily ritual brought grateful thanks from anxious Vietnamese mothers and certainly produced a lasting impression amongst our helpers of how lucky we are. On several occasions we managed to distribute cakes, sweets and biscuits to the children on our milk run. A similar service was organised by the staff at Dodswell Ridge.

What were the main conditions we dealt with? Acute viral conjunctivitis, diarrhoea, constipation, anxiety states and minor trauma. We treated all our patients exactly as we would treat our own patients and with compassion, we hope.

Our A.D.S. was inspected and praised by many visiting V.I.Ps including His Excellency The Governor of Hong Kong, The Colonial Secretary, Lieutenant-General Sir Edwin Bramall and our Deputy Assistant Director of Army Health: Lieutenant-Colonel J. Quinn, R.A.M.C.

Operation Pinafore proved to us that we had the capacity and capability to deal with the sudden arrival of over 4,000 refugees. We employed self help by using refugee doctors and translators. The diseases we saw were similar to those that we see amongst our own patients. The necessity to feed the babies was soon recognised and was dealt with, with equal rapidity. In the writers opinion, this exercise brought home to us all a

realisation of the plight of the refugee and we all became involved in the welfare of these people.

At the time of writing we are still caring for 2,000 refugees at Dodswell Ridge even though the camp has been handed over to the civilian authorities. As we said at the start, we feel that we have proved our fitness for role and in our opinion this is just the sort of role we should be fit for.

Preliminary Announcements—Corps Occasions for 1976

Provisional dates are as follows:-

R.A.M.C. Annual General Meetings of General and Officers Funds, R.A.M.C. Association and Corps Mess Fund	30 April
W.O's & Sgts (Past & Present) Annual Dinner at the Princess Hall, Civic Centre, Aldershot	22 May
Army Medical Services Swimming Gala	4 June
R.A.M.C. Officers' Dinner (7-15 for 8 p.m.)	8 July
R.A.M.C. Officers' 'At Home' (4-6 p.m.)	9 July
Army Medical Services Sports Meeting	10 July
Army Medical Services Drumhead Service at R.A.M.C. Training Centre and R.A.M.C. Association Annual Lunch	11 July
R.A.M.C. Golfing Society—Spring Meeting—Worplesden Golf Club	7 May
Summer Meeting—North Hants Golf Club	7 July
Autumn Meeting—West Hill Golf Club	14 October
R.A.M.C. (Q.M. Adm. & Tech.) Officers' Dinner Club	17 September
R.A.M.C. Retired Officers' Cocktail Party	29 October

(For further details see the Army Medical Services Magazine, Winter Number)