Portraits from Memory

11—Lieutenant Colonel Harold J Bensted OBE, RAMC (1888-1966)

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In April 1943, on my return from Nigeria, I was pleasantly surprised to be invited to call at the pathology headquarters—Army Medical Department (AMD) 7—at the War Office to discuss

my next posting. I had not expected to receive such courtesy or consideration; but, as I discovered later, that was how AMD 7 was run.

I was greeted by Lieutenant Colonel Harold Bensted, whose contributions to medical and scientific bacteriology I knew about and greatly respected. In view of his distinguished published work I had expected to find him as a general, but he was late in joining the regular RAMC, and seniority determined rank. Harold took me in and introduced me to Major General Leopold (Leo) Poole, an officer who knew his way about the army, and knew it very well.

He always agreed, in his modest way, that Harold was much better informed on bacteriology and pathology. I was happy and surprised to learn that these two senior officers knew all about my experiences in Nigeria, and still more happy to know that they thought well enough of them to ask me what I would like to do next.

"Go back to Nigeria," I said at once; "that's a place where bacteriology really matters." I was assured that my expressed wish was understood and would be readily granted, but not for at least a year. It was necessary to get the malaria out of the system, so I would spend at least a year in Britain.

Action this day

As it turned out, a variety of unexpected circumstances conspired to send me first to the Royal Army Medical College in Millbank for some six weeks and then, quite surprisingly, for the rest of the war to the War Office, AMD 7, as deputy assistant director of pathology—a very lowly post, really, despite its fine sounding title. One of my many duties was to edit the *Army Medical Department Bulletin*, which had been given an auspicious start by a Dr Theodore

Fox, before he was called out of the army to edit the *Lancet*, from where he readily, and most helpfully and happily, continued to advise his friends in the War Office on many matters, including how to make the *AMD Bulletin* a means of keeping up the morale of serving medical officers by supplying regular monthly accounts of developments in medicine related to the war effort.

There were, however, many other duties, and I was coached in these, mostly by Harold Bensted but also on particular occasions by General Poole himself. On my first day in the War Office I was very clearly instructed by Harold on the great importance of reaching decisions quickly.

"The worst decision you can make here," he told me, "is no decision. If you make a wrong but definite decision you will soon discover what you have done, and it can usually be reversed. But if you make no decision you simply gum up the works. You learn nothing and everyone is frustrated and rightly indignant. Remember that there is a war on and that 'action this day' is called for."

So I learnt the reality of the phrase "the pain of decision," and for the rest of my life I have always known that, for better or worse, I must force myself to make up my mind, do it without avoidable delay, and make my decisions clear and unequivocal. It was a good lesson for an academic to learn and surprising to learn it in a government department—not quite the way of life usually associated with such establishments, at least in times of peace.

All sorts of interesting and often difficult problems and people passed through our office, which began its daily work when Harold Bensted arrived at 8.30 am and ended when he and I left together, usually at 6.30 pm. Harold always had Saturday off; but he worked all day on Sunday—the one day he could really clear things up relatively undisturbed.

Money talks

We all had the problems created by the shortage of penicillin alongside the growing evidence that if wounded soldiers received enough of it soon enough there was a real prospect that the incidence of gas gangrene could be reduced to a spectacularly low level. We were desperately anxious to get enough penicillin right to the front line for the invasion of Europe; and we succeeded—but only just. Howard Florey and Hugh Cairns were regular visitors, always pressing for more penicillin, for more adequate laboratory control of its use, for more experiments on how best to use it in war conditions, and for steadfast and very unpopular refusals to have it issued in response to uncritical demands for supplies of this "miracle drug" by those who did not know its limitations as well as its possibilities.

On one occasion the general realised that finance was surprisingly a part of the penicillin supply problem.

"We must go and talk to Mr Cash," he said. So we went, the general, well briefed by Harold, accompanied by me to try to deal with any debatable issues concerning technical microbiology. The general fought a fine battle but it began to seem unlikely that we

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were to get what we sought. I had been told to keep quiet unless invited to speak, but at one point my youthful professional indignation took over.

"Mr Cash," I said, "surely. . . ." At that point both the general and "Mr Cash" dissolved in laughter.

"Who told you my name?" asked the finance office director; and I realised that "Mr Cash" was army terminology for all persons related to the Treasury. But, miraculously, the atmosphere changed, and we got our money. An interesting sequel to that episode is that, 15 years later, as a member of the Agricultural Research Council, I was deputed to argue a financial issue with a "Mr Spragg" at the Treasury.

"Fine," I said, remembering Mr Cash, "but please tell me Mr Spragg's real name." It was, incredibly, Mr Spragg.

Vaccination and booster for morale

I recall one remarkable episode in which Harold and I were personally involved. This was the fantastic story of the making of scrub typhus vaccine. Scrub typhus (*Tsutsugamushi* fever) is a very acute and disabling illness with a case mortality of usually about 10% but sometimes as high as 60%. In the retreat through Burma at the start of the war against Japan it played an important part and was greatly feared, with good cause. With the obviously approaching end of the war in Europe, by autumn 1944 plans were being finalised to advance through the forests of Burma to recapture Malaya; and scrub typhus had to be taken into account. Effective repellents against the vector trombiculid mite had been developed, and protective clothing of new design and great efficiency was also now available, so with these advances there was every good reason to assume that scrub typhus would not hinder the planned advance. But the troops had no faith in repellents or protective clothing. They had seen them fail before and, despite good experimental evidence, were not persuaded that they would not fail again in the conditions of the jungles.

At this point some misguided enthusiast in London released details of the tentatively promising results of some laboratory experiments in which a few mice were protected against challenge by being previously inoculated with a killed vaccine made from the lungs of infected cotton rats—notoriously difficult animals to handle. The work was at a preliminary stage and the evidence of protection was very tentative. But it was enough. The troops had well justified faith in the efficacy of their inoculations against typhoid and tetanus. So a vaccine against scrub typhus would be a real boost to morale. Telegrams from South East Asia Command (SEAC) asking for supplies of the vaccine were countered by others emphasising the tentative nature of the evidence of protection and the great technical difficulties of making the vaccine on a commercial scale. In vain. The debate was abruptly terminated by a demand from SEAC for scrub typhus vaccine to be made and supplied at once as an operational requirement on the grounds of morale.

The effect on Harold and the general was dramatic. It was clear that reason would not be allowed to operate against this demand if the morale grounds cited were upheld. But the difficulties of making the vaccine were by no means imaginary. The firm that could best do the job—probably the only one—sent two representatives to discuss the problem with us.

"We'll kill this nonsense," they said, "simply by listing what we must have to do the job." They were not interested, they told us, in "paper priorities"—permits to engage non-existent labourers to erect adequate laboratories with non-available material. They had had these paper priorities for penicillin manufacture and we knew very well what had not happened. No, they required six named top class scientists, some still in civilian life, to work under the orders of

one of them, who, in turn, would work under the orders of General Poole, who would be advised by the firm about all essential needs and procedures. They required also a squad of army engineers and workmen on the ground with all necessary materials within a matter of weeks. That would surely be enough to kill this mad idea. Harold looked at them sadly.

"I fear," he said, "that none of this will kill the mad idea. The issue will go to the adjutant general who will decide if the morale issue makes a case for 'operational priority.' If it does you will find that things will happen in a way that you have not yet experienced."

As we walked homewards that evening Harold said, "I have persuaded the general to go on an extended visit to Scottish Command. You and I alone will be responsible for the presentation to the adjutant general. General Poole will have no part of it." I wondered if that would be how the general would wish it.

"I'm asking him not to be here or to sign the presentation," said Harold, "because if this thing turns out to be a mess—as it might—it could cost him his CB, an honour which he thoroughly deserves [and later happily received], so if it turns out ill, it is only you and I who will be in disgrace—and our military careers are not of great significance. The end of the war is coming, and soon after that we'll both be civilians—you first and me not long after."

Wit to win

It was as Harold said: operational priority was granted. What this meant soon became evident to me. A minor official at the Treasury asked me by telephone if it was true that we had an operational priority for some vaccine or other, and could he have an outline of what it was about. I offered to send him the files.

"You can't do that," he said, "not with an operational priority. No—no! It's just that I'd like to crawl round on my hands and knees and beg a corner where I could look at the files to add up the likely cost of all that's planned—not in order to stop or modify it, as is our usual practice—but just to see what it's going to mean to the taxpayers. I don't suppose it's much good, is it? The things that get operational priority are often quite useless."

Next, a cheerful voice on the telephone from someone else told me that he had the job of finding a code name for our operational priority. Could I tell him in a few words what it was all about?

"We're set to make typhus vaccine in one hell of a hurry," I said.

"Hold on," he replied, "I have the very name if it hasn't been taken for something else. I'll just check." In minutes he was speaking again—this time with a great grin on his face as I could sense even at the end of the telephone.

"Yes—you're *Operation Tyburn*." It was at that moment, I think, that I finally realised that we had the wit and ingenuity needed to win wars.

The vaccine was made, and more than one of the scientists involved contracted the disease, greatly adding to our understanding of how to prevent infection in laboratories. Was the vaccine any good? Probably not, because of the many type variations of the responsible rickettsias in a forest or jungle environment. But we were never able to test it. In August 1945 the atomic bombs ended the war without any invasion through Burma. The vaccine was then used in 1947 to immunise men going into Malaya to reopen the rubber plantations. But 1947 was the year when chloramphenicol appeared and it proved a knock out for scrub typhus. Everyone showing signs of fever was given chloramphenicol, the immunised as well as those not immunised. So we never had a chance to assess its value.

In assessing Harold's value, however, it is impossible to do better than quote the old fashioned but classic words: an officer and a gentleman.