

# AIR RAID PRECAUTIONS AT REPAT

Daw Park Repatriation Hospital, built as a military hospital opening in 1942, needed to have facilities to cope with the possibility of an air raid. By March of 1942 air raid trenches known as the 'Dawes' Paddock Shelters' had been designed, constructed and regulations for their use issued by the Commanding Officer, Freddy LeMessurier. This summary tracks the documented history of Repat's air raid shelters and precautions.

## General Rules for ARP in Military Hospitals

In late 1941, the Hospital Administration Committee responsible for all the military base hospitals considered the subject of 'Passive Defence', as it was called in military circles, and decided that all hospitals would need some standard set of regulations to follow. The rules included:

- Slit trenches for patients and staff;
- Should, if possible, attempt to make any facilities gas proof;
- Trenches needed drainage considerations;
- Need one central 'blast proof' room as ARP Chief Warden's post with a telephone;
- Auxiliary water storage to keep the hospital functional if water services were cut off.
- Emergency lighting in all air raid facilities in the form of 'Aladdin' kerosene lamps
- Commanding Officer at each hospital to devise an emergency plan.



Aladdin Kerosene Lamp (1)

Hospitals already completed had made their own arrangements. Concord Hospital in Sydney had dug open trenches. The committee decided that they would need to make them covered, at least for the patients. Open trenches were still acceptable for staff. (2) Because the Springbank Military Hospital was still under construction when these guidelines were devised, it is most likely that the trenches there did comply with the suggested format.

## Designing a Strategy

On December 30<sup>th</sup> 1941, the Australian Defence headquarters sent telegrams to every state to hurry them along in making their establishments air raid-ready. The South Australian

military headquarters asked the architect, **Louis Laybourne-Smith**, to sort out the matter with the **Commanding Officer, Frederick N. LeMessurier**. Laybourne-Smith and LeMessurier hoped that the Army would help them to design an adequate scheme, but no assistance was forthcoming. About a month later, they wrote back to the South Australian Headquarters and asked them for help. By this stage Commonwealth and State headquarters, as well as LeMessurier and Laybourne-Smith considered the matter quite urgent.

Some time in early February, Mr Laybourne-Smith drew up a set of architectural plans for some air raid shelters in the paddock adjoining the hospital. (3) Around the same time but independently, The South Australian Works Director at headquarters kindly offered the services of an architect of the Department of the Interior, a Mr. W.H. Harral, who had trained in the area of Air Raid Precautions. A meeting with the Commanding Officer was quickly set up. (4) Four days later, on a Friday, Harral came to the Hospital and made recommendations. As soon as he left, LeMessurier and the Garrison Engineer at the hospital set to devising the written plan. By Monday it was done and submitted to State headquarters. (4)

Sadly, neither set of drawings nor the action plan have survived today. However, we do know that there were **separate facilities for patients and staff**. The patients' covered trenches were close to the Eastern ends of the wards, and the staff shelters - described as slit trenches rather than specifically covered trenches - were further away, on the other side of Daws Road situated on land belonging to the Springbank Air Force Camp. (3) The hospital on several occasions made use of the camp land, the camp's interests being recognised as subordinate to the needs of the hospital. (3) The myth, however, of a tunnel running between the two has in no way been substantiated by documentary or oral history.



VADs entering the staff Air Raid Trench at Concord Military Hospital, Sydney. (5)

### Design of the Trenches

Being that there are no existing drawings specifically of the Repat air raid trenches, and even if there were we couldn't be sure we had the plans for the chosen design (since there were

two), we rely on student's excavations to uncover any remains of the trenches to see exactly what eventuated. In the meantime oral history, as well as descriptions afforded in the hospital War Diary and other documents, help us to approximate what we can expect to find.

As was standard protocol for defence establishments at the time, air raid shelters are shown on the site's sewerage diagrams, however the date of that plan is 1941. Later generated plans are 'as constructed', meaning the plan was never re-surveyed. (6) Since the plans were drawn before the shelters were actually constructed in February-March 1942, we don't know if any alterations or extensions were made to the original plan.

Not surprisingly, it is when the frugal questions of accounting and cost arise that most details about construction and building materials are revealed. The shelters were constructed from the following materials:

- 88 'Trestles' built by Messrs Webber and Williams, purpose built;
- Additional roof timbers;
- 300 sheets galvanised corrugated iron, to be rivetted in place;
- Unspecified amount of curved iron sheets for roof;
- Sandbags . (3)

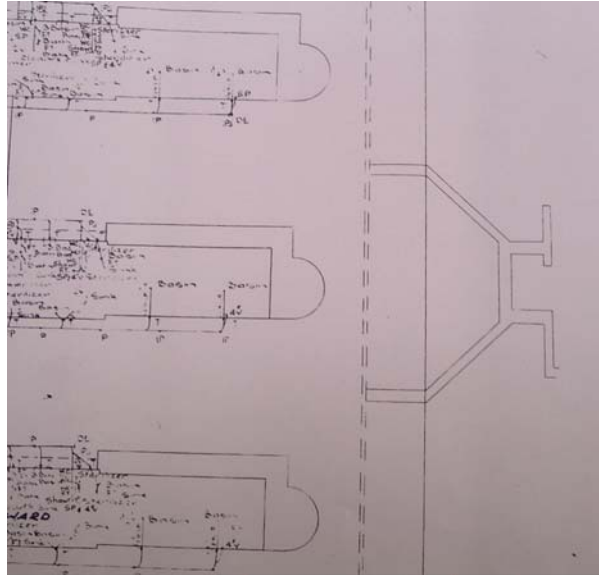
Can you imagine what they might have looked like?

### Putting Plans to Action

The air raid trenches were originally supposed to be tendered for and contracted out, as was standard procedure for any work needed. However, the builders and architects had been having a great deal of difficulty finding labour, even for the work already commissioned. It was wartime, and many able-bodied men were already enlisted in the Forces. Additionally, only 'natural-born British subjects of good character' were permitted to be employed on 'Secret Defence Works'. (7) On March 24<sup>th</sup> it was decided that 'owing to the scarcity of labour and the urgency of the work', the **military Engineer Services** would build the 'Dawes Paddock Shelters' without tender. (3)

The shelters were located at the Eastern end of the ward blocks, with two or three entrances – two in line and a possible rear entrance – , and were actually networked covered trenches. (7) When headquarters asked for an account of costs for the shelters to be reimbursed, the military simply said that they had not kept costs for the project. In effect, headquarters had to be satisfied with the labour and some of the materials for the shelters as a gift! Whilst all other A.R.P. work at the hospital was itemised in expenditure under the heading 'Passive Defence', little of the cost is attributable to what has come to be the flagship of Passive Defence at the hospital, the main shelters themselves. (4)

Since there was little that headquarters could do at this stage about the lack of record keeping, Davies told the architects that 'as the work is being carried out as stated above, it is evident that we need not worry any further about this item'! The military engineers' attitude towards record keeping is in part responsible for the difficulty experienced today in researching specifics of the shelters, although on the other hand it provided cause for complaint that brought the shelters into the spotlight in correspondence files.



Part of the original sewerage diagram, showing the trenches. (6)

### Problems with the Air Raid Shelters

It is common in historical research to find that the most records, especially correspondence files, are generated when problems arise. These problems also help to give flavour to the culture of another society at another time.

There were **four particular issues associated with the air raid shelters** that brought them under the CO's watchful eye. The first arose when Laybourne-Smith claimed for Architect's fees for drawing up two sets of plans for the shelters and supervising their construction. Tension arose as to whether he should be remunerated for work on the shelters. Engineer Services, who supplied the Army labour, wrote to the Director General of Works and said that 'work is being carried out by military labour under the supervision of one of our officers. Costs are not being kept, and this does not appear to be an item on which architectural fees should be charged'. (4) Both Laybourne-Smith and LeMessurier disagreed, outraged that Laybourne-Smith should not be acknowledged for the work he had done, and each wrote to the South Australian Military Headquarters at Keswick in protest. Laybourne-Smith wrote that:

'we consider the comment sent to the works director somewhat gratuitous and in any case we have made no application or suggestion that fees should be paid to us for any work that we do not do.'

It seems the protest was in vain, as expenditure reports show Laybourne-Smith never did receive any money for this work. Interestingly, both sets of Laybourne-Smith's drawings of

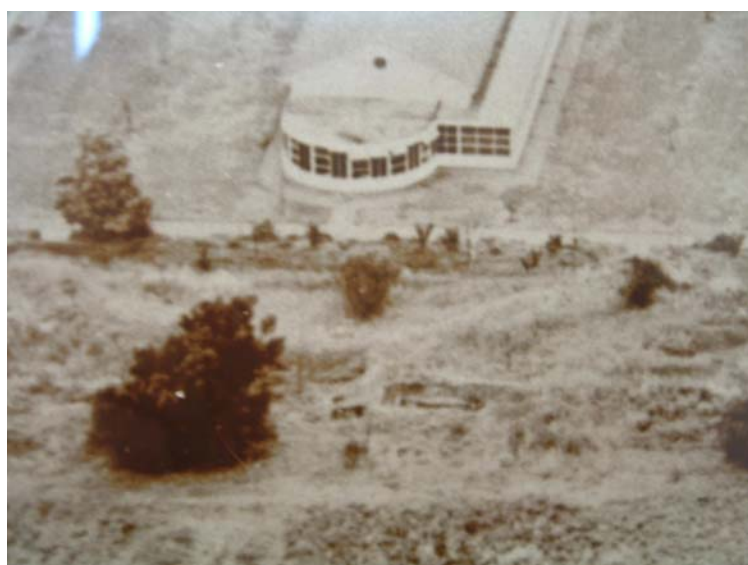
the trenches disappeared without comment from the archived set of hospital plans originally held by Works and Services, which otherwise are complete.



Centre: Louis Laybourne- Smith, Architect, and right, Brigadier Bundock at the hospital in Oct. 1942. (8)

Once the shelters were dug, the area around Dawes' home became used for **shennannigans** by 'a congregation of undesirables'. Commanding Officer Freddy LeMessurier wrote to Lt-Col Steele of the Springbank Camp across the road to provide a picquet to patrol the area 'owing', he said 'to drinking and unseemly conduct with undesirable women in the paddock adjoining the entrance gates to this hospital'. Steele readily agreed to provide the picquet at 'the earliest possible date'. (3)

The next time the trenches come into the spotlight was when they **flooded in May 1942**, six weeks after they were constructed. The drain along the path had been poorly constructed in such a way that the Southern end of the drain nearest to Daws road was higher than the point where the entrances to the trenches were. At the first heavy rain, the stormwater filled up the trenches. The solution was for 'the Garrison Engineer to dig a spoon drain on the eastern side of the dugout in Dawes' Paddock, to prevent water running into this area'. (3) It is possibly as much the depression from this spoon drain that is visible in the 1948-49 aerial photographs as any raised mound itself.



This photograph (9) looks west directly towards Ward 3. There are entrances visible along the path both North (where a shadow from the entry is evident) and South (by the tree) of this ward.

The trench structure is visible as a 'U' or 'H' shape, with two corridors leading in, a connecting tunnel, and additional tunnels extending East off of that one. Just North of the large tree is the third entrance, marked so on the E&WS Sketch Book. (6a)

The final issue indirectly concerning the shelters was the **use of Dawes' Paddock as a short cut** from Daws Road Eastbound foot traffic heading towards the Springbank Road and Goodwood Road intersection. (3) Children like Barry and David Critchley and Des Parker regularly cut this corner on their way to school, but so did troopers from the Springbank Camp. Brigadier Bundock (see photograph page 5) was particularly concerned about the short-cutting. At the end of March, just after the trenches were constructed, signs had been put up at the North-East and South-West corners of Dawes' Paddock that read: '105 Military Hospital - Out of Bounds.' This had little effect, and six weeks later, Brigadier Bundock ordered the paddock to be fenced. (3) There is only one instance where additional fencing appeared in the itemised expense list for the project, and it comes under the heading of 'Passive Defence', therefore we may infer that the purpose of making the Dawes' Paddock 'Out of Bounds' was to prevent unauthorised access to the trench area. (4;3)

The trench area was never specifically made out of bounds for patients and staff of the hospital during wartime. In the Standing Orders of the unit, and in the lesser Routine Orders, areas were regularly declared '**Out of Bounds**' for patients, such as Dawes' House itself, which housed women, officers and VD patients. It was considered necessary to keep these persons separate from the bulk of the patients. (3) Constructively, however, it would not have been permitted for anyone to enter the shelters without reason. Patients who did so would be considered Absent Without Leave - for which the 'punishment' was to be treated as a cot case, disallowed from getting out of bed and forced to use a bed pan! Staff who did so could be caught, arrested and taken to a cell in the Guard House by the guard provided by Springbank Camp, stationed to supervise the paddock area. John Olson, an orderly at 105 Hospital remembers being sent down the shelters routinely to check for AWL patients who might have gone down there for some privacy with the girl-friend! (10)

### Other Air Raid Precautionary Work at the Military Hospital

LeMessurier and Davies both considered Air Raid Precautions a very important matter. They were proactive in wanting to fulfil the requirements imposed, and often asked for expert assistance to help with design. The Hospital Administration Authority had decided that '**splinter-proofing**' the wards was not feasible in 1941. (2) However; only three months later Davies asked the architects to look into how difficult this would really be. The builders and architects agreed that the cost would be around £400.

They would:

- Fill the wall cavity with reinforced concrete;
- Add more concrete piers in foundations;
- Put a 7-inch reinforced concrete slab over the ceiling with netting to catch any 'dislodged fragments';
- Use 'armoured' glass with wire in it;
- Make use of 'Solomit', a new building material with shock absorbing and heat insulating properties.



F. N. 'Freddy' Le Messurier (L) with Governor General Lord Gowrie, VC. (8)

With one ward block still in the early stages of construction, there was a great opportunity for them to trial this method. South Australia was the only state at this time to even think about bomb-proofing a pavilion ward! (4)

Besides the shelters and the splinterproof ward, there were a number of **other Air Raid Precautions** in place at the military hospital. To appeal to the human side of enemy bombers, red crosses were painted on the roofs of several buildings to inform that the complex was a hospital. These buildings were: the boiler house, nurses' quarters, the kitchen and one of the ward blocks. In addition, blackout blinds were fitted to all windows including those at the ends of the wards in the solarium. Another feature of the Daws Road hospital is that the old operating theatre North of the Admin block is also 'splinterproof'. (4)

The little rooms underneath Admissions and Discharges and Ward Six (see photo below) are very sturdily built, falling short of splinterproof classification, but not by far. The robust construction here had nothing to do with air raids or Passive Defence. Contrary to popular legends, these rooms were not used for air raid shelters, but to house 'calorifiers', large heat exchanger tanks to heat water for the steam system that was piped all around the hospital. (11) Steam technology was still potentially highly dangerous, and a boiler exploding could do a lot of damage. Rather than keeping blasts out of these rooms, the design was to keep any blast *in!*



Stairs down to Calorifier room under Admissions and Discharges (12)

### **'But what about the...' - Can documents prove a negative?**

There are a lot of myths about underground rooms and secret tunnels at Repat, but no such secret constructions appear on any plans, nor in the complete set of specifications for hospital construction. The mythical tunnels suggested by oral history include:

- Tunnel across Daws Road from Boys' toilets at Pasadena High School
- Guard House tunnel
- Mortuary cellar or tunnel
- Matron's tunnel from Dawes' House to Ward 17
- Tunnel from Admin Block across Daws Road or to Guard House
- Two air raid shelters

In the course of preparations, Repat staff have investigated a number of leads suggested by current and former staff and patients, and also students of Pasadena (formerly Daws Road) High School. The 'tunnel' from the boys' toilets at the high school ended up being only a drain; the Guard House and Mortuary both had since had concrete slabs poured over the floors; the Ward 17 'cellar' ended up being only a crawlspace and the Dawes' House cellar merely a cellar; and the under-floor area of Admin revealed no tunnel.

If tunnels *were* built under the hospital buildings, they really needed to be constructed before or during the main construction, and therefore should show on the plans and specifications, which have all been located (with the exception of Laybourne-Smith's disputed plans of the Shelters). The only proper underground rooms indicated anywhere are the Calorifier rooms and the Dawes' House cellar, none of which has any possibility whatsoever of connection to tunnels. Tunnelling would also have involved considerable expense and labour implications that are not present in any project expenditure reports, or else the absence of costs being kept would have warranted comment as was the case for the Dawes' Paddock Shelters. In conclusion, it seems highly unlikely both from documentary sources and physical examination of the site that there are any such tunnels linking hospital buildings.

The questions, however, are still far from answered: What shape were the shelters? How big? What artefacts may be associated with them? How much use did they see? Do they still survive and in what condition are they? And where is the blastproof operations room that the Hospitals Administration Committee made compulsory for an emergency telephone and first aid point? Hopefully student excavations will uncover these answers – and many more – along with the air raid shelters, in a snapshot in time of Adelaide life during World War II.

Elaine Hanneson, last updated 7/9/2007

## **References**

*(Additional information available on request)*

- (1) Photograph of portable Kerosene Pressure Lantern. Such lamps are known to have been used by military units, and it is a possibility that this model was installed in the shelters.
- (2) Minutes of Meetings of the Hospital Administration Committee; Discussion Regarding A.R.P. at Base Hospitals and Administration of Base Hospitals, Held by Australian War Memorial, Canberra, AWM 54 403/2/18.
- (3) War Diary of 105 Australian General Hospital, Held by Australian War Memorial, Canberra, AWM52 11/2/20.
- (4) Colonel Light Gardens Hospital General File, Held by National Archives Sydney, D618 M127.
- (5) Photograph of VADs at Concord Military Hospital, Held by Australian War Memorial, Item #026570, online at [www.awm.gov.au](http://www.awm.gov.au).
- (6) 'As Constructed' sewerage diagram held by Repatriation General Hospital Daw Park; similarly, but with entrances and paths such labelled, see (6a) Sketch Book 1180 of the Property and Survey Branch of the E&WS, Held by State Records of SA, GRG53/166, Unit 48.
- (7) 'Secret Defence Works', Regulations inserted in all Commonwealth Works and Services wartime defence tenders, see, eg, General Military Hospital, St Mary's, SA – erection of various buildings, Held by National Archives of Australia, Adelaide, AP567/1 1941/4.
- (8) Photographs enlarged from group photograph taken by Mrs J.E. Anderson, and published in Peter Last, *The Repat*, 1994.
- (9) Photograph enlarged and contrast-enhanced from aerial photograph of Springbank Hospital, held by Repatriation General Hospital (Daw Park).
- (10) Telephone Conversation with John D. Olson, 1/8/07. Interviewed by E. Hanneson.
- (11) General Military Hospital, St Mary's, SA – erection of various buildings, Held by National Archives of Australia, Adelaide, AP567/1 1941/4.
- (12) Photograph taken 15/9/07. E. Hanneson.