

Surname: Reinold	First Name(s): Betty	Army Number: W/	
Maiden name (if applicable): Southall	Name used during service: Southall	Rank: Junior Commander	
Main base: Aberporth Burrowhead	Training base: Basic – none Ack Ack - Manorbier Officer – Craigmillar, Edinburgh	Enrolled at: Hereford	
Platoon/Section:	Company/Battery: 210 (M) Battery	Group/Regiment: Royal Artillery	Command: A. A. Command
Year(s) of service: 1/09/1939 to 1945	Reason for discharge: Commissioned before 1941 so under regulations newly brought in, I was eligible for an immediate discharge in 1945	Trade: Kinetheodolite Predictor Operator Oswestry - Instructor	
Uniform Issued:	Photo: 		
Description of daily tasks:	<ul style="list-style-type: none"> • When I first went into the ATS they used us mainly to serve food to the men. As no-one else seemed able to do it, I ended up being trained to cut up meat ready for the meals. • The Kinetheodolite was a German machine. It was a huge camera mounted on stone pillars and there were two of them operating at the same time. There was one on one cliff top and another one over on a second cliff top. It had a camera in it with a film inside, and you would move it up and down and around following a target. When you had found a target, you followed that and as you followed it, so the film moved through and took a photograph of the target and of the shell burst that had been fired by the gunners. When they first started using radar, they could find out the range, but they couldn't work out the height of a target. With the kinetheodolite you knew the base from one piece of equipment to another, and so if you pointed to the target the exact angle would come out on the film of each kinetheodolite. If you had the base and the two angles you could then calculate the height. • When you had finished your shoot, you unloaded your camera and took the film back to what was called the evaluating room and it was put through an evaluator where you could adjust it. You had cross wires and could read off at the bottom 		

	<p>the various angles. The angle of incidence and the angle of azimuth and then by trigonometry you could work out all the heights etc from the details off the film.</p> <ul style="list-style-type: none"> • There were girls who were photographers who used to develop the films. • The Kinetheodolites were also used to find out whether the guns were calibrated correctly, as when you put your films through the evaluator afterwards, you could see if all the shell bursts were permanently behind or in front of the target, then you knew that the guns were out of alignment.
Pay book:	Not available
Memorable moments:	<ul style="list-style-type: none"> • I started off doing general duties with the ATS but then was picked to be a Kinetheodolite operator. • I trained to use the Kinetheodolite at Manorbier, as that was the only place that had them. • None of us were any good at maths but we did have maths lectures at Manorbier by the most gorgeous Major who was absolutely wonderful. I had never been any good at 'trig' at school but he just had the right way of putting it across. • As an 'other rank', the thing that I remember most was the dreadful straw palliasses which you had to lie on, on iron beds all in a long Nissen hut. They were one long 'sack' full of straw They were the most uncomfortable things I have ever slept on and I have never forgotten them. • At Burrowhead we had an extraordinary adjutant who was of an old sort, of the 1st World War cavalry regiments and he used to go charging around the camp on a white horse. He was marvellous, I can't remember his name but he had a bright idea ... at practice camps various regiments came in for firing training, and there were all these men with nothing to do. So, we got a large NAAFI type Hall so that we could have some dances. There were all the kine girls, there were only about 9 of us, but then the predictor girls came along and there were cooks and clerks and I suppose altogether there must have been about 20 of us girls on the camp. Then we had about 140 men and they had only got a wind up gramophone but we never stopped dancing! Actually it went down quite well ... it was funny. • There weren't very many Kinetheodolites in the country and actually when they started breaking down, as they were German made, they couldn't get the parts and they couldn't repair them, so Vickers tried to make one. I never used it because I had gone by that time, but they were never very good and then they didn't use them anymore as they were not really needed. They had found out how to estimate heights and things. • We operated for quite some time. It was a lovely job, but when they started bringing in girls to be height and range finders I became a predictor operator. • As a predictor operator I used the Sperry's and the Vickers equipment, but we all liked the Sperry's best. And the height finders were the ordinary Bar and Stroud ones. • When in the ranks I was in Nissen huts and gunsites were wooden buildings. The places where I saw most action were Lowestoft and Northumberland. • As an instructor I showed others how to use predictors and height finders and I used to give lectures on electricity. That sort of thing was quite odd especially to most women then. I had to tell them how electricity worked and all about lenses etc • I asked the Colonel at Oswestry could I have a dog – I was permanent staff then. He said yes. Actually, it was my sister and brother-in-law's dog, but as it was a Bull Mastiph and it was so huge they couldn't afford to feed it as the war went on, they couldn't get the food for it. So they said would I have it. I could get food from the Officer's mess and the Sergeant's mess – it lived on left overs.

- On a gunsite near Norwich we were in tents as the gunsite was in the middle of a field. The Officer's Mess and a Sergeants Mess were buildings but we were in tents. That was where I was glad that I had my dog because there were rats coming out of these fields all around us and he saw them all off in no time. He died in Norwich in one of the tents, but I had him for quite a long time.
- One marvellous job I did after the gunsites closed down at the end of the war, was to do an inventory of all the various gunsites over the country. I used to go around all these gunsites saying, so many beds, so many mattresses, so many this and so many guns and so many shells and everything else. I went around from camp to camp doing that for quite a while.
- At the end of the war, when there were no more gunsites being used I was sent to Aldershot to ATS Headquarters.
- I wasn't at Aldershot for long. I hadn't worked with women only before, because all the officers on gunsites were men and I wasn't used to being only with women. I didn't enjoy it so, even though I had only been there for three days, I asked if I could take some leave. I hadn't had any leave for about 18 months so wanted to use my back leave. Whilst I was on leave a directive came out that anyone who had been commissioned before 1940/1941, could apply for immediate discharge. So I thought, right, I'm not going back to Aldershot, so I left.

Photos:

Military Identity Card

