Arthur enlisted in E Company, AN&MEF on 11th August 1914, stating that he was born in Red Hill, Brisbane, was 28 years 7 months old, was a blacksmith by trade and single. He gave his father, Mr Ralph Cox, c/- Brisbane Tramway Co, Brisbane as his next of kin. This information was not entirely correct. He was in fact married, he married Annie May Brown on 1 May 1910 at Darlinghurst. They had a son, Edward Ralph Cox, born 14th May 1909.

He returned from Rabaul and was discharged, term expired, on 18th Jan 1915 having completed 161 days service.

On 1st May 1915 Arthur joined C Company, 24th Battalion, regimental number 738 and sailed with the battalion from Melbourne on 19th May aboard the EURIDES. He landed in Gallipoli on 28th August and returned to Suez after the withdrawal from the Peninsular. At this time, he notified the Military that he did not wish to make any allotment to his wife as she had left him and living with another man.

On 19th March 1916 he left Suez on the DEMOSTENES and arrived back in Melbourne on 16th April having been deemed "undesirable" and was subsequently discharged on 19th April.

On 31st June 1916 he again enlisted in the AIF, this time as part of the 6th Reinforcement for the 57th Battalion, regimental number 2632, this time stating that he was married.

He left Melbourne aboard the NESTOR on 2nd October 1916, arriving in Plymouth on 16th November 1916. During this service he had many periods of AWOL and several charges associated with gambling. He also suffered several bouts of malaria and trench feet as well as being hospitalised for influenza. He left the UK on 12th December 1918 aboard the NESTOR arriving back in Melbourne on 1st Feb 1919. He was discharged as medically unfit on 3rd March 1919.

Whilst he was away his wife divorced him in 1916.

Arthur's son, Edward Ralph Cox joined the Army, NX105535 and served from 3rd Sept 1942 till 23rd November 1945.

Arthur died on 15th October 1943.