A group of South Australians formed the Anchor Mining Syndicate to assist the war effort in 1915. As certain metals were in short supply, it was decided to investigate a reported tungstate ore (scheelite) deposit in the Napier Ranges, inland from Derby in Western Australia’s far north. In November the syndicate commissioned Basedow to undertake the exploration.

Basedow saw this trip as an opportunity to explore an area little known to science and once his obligations to the syndicate were met, intended to extend his travels in the western Kimberley. This additional work would be subsidised by Sydney’s Australian Museum, which contributed £50. In exchange, Basedow was to supply the museum with natural history and geological specimens and Aboriginal artefacts.

Accompanied by mining agent Gilbert St John Sanders, an assistant on the expedition, Basedow departed Adelaide on 4 March 1916 on the SS Indarra. A few days were spent securing supplies at Fremantle, where Basedow met with the Western Australian premier, John Scaddan. Basedow and Sanders went ashore at Port Hedland to sketch and photograph rock engravings and on 23 March reached Derby, where they spent a week making final preparations.

On 1 April Basedow and Sanders departed for Napier Downs station, via Meda station, from where they would inspect the potential mineral deposit at Narlarla. Their gear was carried on the Kimberley Downs’ wagon, which was transporting supplies from Derby, while they proceeded on foot. From Kimberley Downs they travelled by horse and cart to Napier Downs. From here they travelled to inspect the deposit at Narlarla. However no minerals worth exploiting were found at the Narlarla deposit. After several short trips in the vicinity of Napier Downs, to inspect other mineral deposits and collect natural history specimens, Basedow and Sanders returned to Derby.

Now that his obligations to the syndicate had been met, Basedow focused his attention on his own interests. He and Sanders made two more journeys out of Derby, as well as short trips in the Derby area. On 4 May the pair departed Derby on the cutter Rita.
and headed for Camden Sound. As Basedow reported in a published report of the expedition, the *Rita* was carrying a heavy load and later that night they ran into rough weather on entering Stokes Bay:

Now we suddenly received the full force of a squall. The boat was heavily laden with fencing wire and horsefeed, which we had aboard for Obagooma Station, and thus she did not ride the waves too well, but plunged her bows beneath the water. She pitched relentlessly, and the volumes of water shipped necessitated the pump to be in operation all the night. Sleep we had none, but the discomforts of *mal de mer* made themselves all the more apparent.

Basedow had several encounters with Aboriginal people on this trip, especially at the missions at Sunday Island and Port George IV, on Camden Sound.

Earlier, at George Water, his party made contact with a couple and their son, who gave a demonstration of his prowess on one of the distinctive rafts of the Kimberley. Basedow took several photographs of the youth on the raft and described its manufacture in detail.

The final stage of Basedow’s Kimberley travels commenced from Derby on 5 June. This time he and Sanders went by ship north to Wyndham where they were met by Reverend ER Gribble, who took them to Forrest River Mission in the mission’s motor launch. Here Basedow made further ethnological and geological observations. After three and half days Gribble took the visitors back to Wyndham, where they boarded the same ship bound for Adelaide. Basedow wrote in his 1918 article that he was kept busy on the return journey with a number of medical cases:

I was lying upon my bunk, endeavouring to find a little sleep in the hot stagnant air of the cabin, when a loud knock came at the door, and the Chief Officer entered. He seemed perturbed, and asked me to come immediately to a man who had fallen overboard, but had been rescued from the water in a lifeless condition. We hastened abaft to the unfortunate fellow, who was a steward, and after a while managed to call him back to life. I was kept busy throughout the trip. Besides several malarial and other medical cases, which I removed to the ship’s hospital, a chapter of accidents was chronicled. The Chief Officer was rammed by a bullock which splintered his forearm, a sail-maker slashed his arm, and the butcher swallowed a bone which stuck in his gullet. The recent visit of a quack to the district was bearing fruit in the shape of numerous aching teeth he professed to have filled; they now had to be extracted.

Basedow used three cameras on this expedition, one of which was a reflex camera, which took glass negatives. Among his photographs from the Kimberley are many fine portraits of Aboriginal people, as well as images of landscapes, and the pastoral and mission stations where he stayed.