when a rescue aircraft made a well-timed evacuation. In the meantime, the Flight Commander stayed with Force 136 Guerillas.

The Advantages of the Lysander Aircraft.

298. The advantages of the Lysander for the unique type of work it was called upon to carry out were as follows:—

(i) Weight lifting capacity.

(ii) Automatic flap action, meeting all the conditions of flight, e.g. a sudden loss of lift in a sudden violent turn or in conditions of turbulence over the hills.

(iii) Capability of cruising at low speed in

conditions of bad visibility.

(iv) High rate of turn, of great value in confined spaces.

(v) Fixed undercarriage, strong and able to stand the shocks of heavy landings.

- (vi) High engine power and light wing loading, facilitating quick take-off from waterlogged strips, and an immediate high rate of climb.
- (vii) Reasonable flying endurance of aircraft, the pilot never being embarrassed in a difficult operation by shortage of fuel.
- 299. But even with these advantages, the technique required of the Lysander pilots was one of skill, particularly when landing on very small strips. On such occasions the normal approach speed of 85 m.p.h. had to be reduced to 70 m.p.h., and a precision touchdown at the very beginning of the strip, with throttle promptly closed, had to be accomplished.
- 300. From May, 1945, to October, 1945, 357 Squadron Lysanders flew no less than 1,310 hours. 405 sorties were attempted and 363 of these were successful. Personnel infiltrated had numbered 214, and evacuations, 330. In addition, some 104,580 lbs. of stores were landed behind the enemy lines.
- 301. A fitting tribute to the Lysander operations was paid by Headquarters, Group "A" of Force 136 on 23rd June, 1945.

## PHOTOGRAPHIC RECONNAISSANCE

## A Record of Achievement Built on Perseverance of Crews.

302. Photographic reconnaissance has come out of the South East Asia Theatre with a record of achievement built upon the perseverance of its air crews to master the difficulties of climate and terrain. A flight of 2,600 miles in nine hours five minutes was one of the longest flights ever done in P.R.

303. The radius of P.R. cover in December, 1943, when the Command was formed, was not more than 680 miles, since long range reconnaissance by Mosquitos was only in process of being attempted in the coverage of the Andaman Islands from Comilla and, a little later, of Bangkok in Siam. When the war with Japan ended in August, 1945, the range of P.R. aircraft in South East Asia Command was such that coverage of the Andaman and Nicobar Islands from Ceylon, flights deep into Siam and French Indo China from Rangoon, and a detailed coverage of targets in Sumatra, Southern Malaya, Singapore and Java by aircraft based on the Cocos Islands, had become normal routine.

304. The Mosquito indeed made amends for the structural defect which had curtailed its use in this Command, for it set up two records in 1945. Firstly, a Mosquito XVI broke the long distance record on March 22 for this type of aircraft in any theatre of war, with a flight of 2,493 miles in eight hours forty-five minutes, covering the Bangkok-Singapore railway to a point south of the Malayan frontier. This performance, however, was eclipsed by a Mosquito XXXIV based on the Cocos Islands, which on 20th August, 1945, flew 1,240 miles to Penang Island and then went on to cover Taiping town and airfield at 17,000 feet. On the return home a survey run was made on the K8/12-inch camera. This was the longest P.R. flight to be made in the Command, and covered a total of 2,600 miles in nine hours five minutes.

## Photographic Survey of Burma.

305. Possibly the two most outstanding contributions by photographic reconnaissance to the war in South East Asia were its survey photography of Burma at the beginning of 1944, and its detailed coverage of enemy occupied territories after the fall of Rangoon in May, 1945, in preparation for the large scale assault on Malaya.

306. The survey photography of Burma fulfilled a long-felt want by supplying accurate and up-to-date maps of Burma which were practically non-existent up to this time—the Air Force and Army having to use 1914-15 ground surveys which, as photographic reconnaissance proved, showed major errors. The new survey of Burma was one of the best examples of R.A.F. assistance to the Army in this Theatre.

307. Faced with the urgent and extensive programme of photographic reconnaissance in Malaya and Sumatra for Operation "Zipper", a detachment of 684 Squadron (Alipore) commenced operations from the Cocos Islands in July, 1945, with four Mk. XXXIV Mosquitos which had just been released for service use in temperate and tropical climates. The P.R. programme for "Zipper" went steadily forward and, by the end of July, was 60 per cent. completed. A second detachment of 684 Squadron Mosquitos was operating at this time from China Bay, Ceylon, for the coverage of the Andaman and Nicobar Islands.

## P.R. organisation after fall of Rangoon.

308. At the time of Rangoon's capture in May, 1945, the Photographic Reconnaissance Force was commanded by Colonel Minton W. Kaye, United States Army Air Force, with Group Captain S. G. Wise, D.F.C., as Assistant Air Commander:

309. The Force controlled two R.A.F. Squadrons, No. 681 (Spitfires) and No. 684 (Mosquitos), while the Americans had a P.38 (F.5) Squadron, a P.40, and a B.24 Mapping Squadron. The American Units, however, had completed their task as a P.R. integrated force in the Command and, after carrying out a few P.R. sorties at the beginning of May, they then retired to prepare for withdrawal to China with the remainder of the American Air Forces in the Theatre. The two R.A.F. squadrons, therefore, were left to operate on their own.