American Experience in Casualty Evacuation.

244. Since American aircraft operated as part of the Allied Air Forces in the Theatre until integration in the Command ceased on 1st June, 1945, it is not inappropriate to mention something of the interesting experience of American L.5. aircraft employed in Burma in casualty evacuation and in other secondary important tasks associated with supply to the ground forces.

245. A special research report on evacuation of casualties from the forward areas in Burma which was produced in July, 1945 by Air/12G (Research) Headquarters, Allied Land Forces, South East Asia, described the work of two American squadrons operating L.5. aircraft with Fourteenth Army in the campaign.

The purpose of the report was:—

- (a) To consider the best method of using L.5. aircraft for casualty evacuation in the light of the American experience.
- (b) To estimate the number of aircraft required to evacuate the casualties from a Corps in action with varying degrees of battle activity.
- 246. Throughout the period considered in the report—November, 1944 to April, 1945—the squadrons worked with 4 Corps and 33 Corps from a rear strip close to the Casualty Clearing Station. The squadrons of light aircraft were allotted on the basis of one for each Corps of three Divisions. The C.C.S. was sited at the edge of the strip. Forward strips were made by the troops, and the location of the strips was signalled to the squadrons. A reconnaissance plane would fly over the site in the early morning and photograph the strip. If it was considered satisfactory for landing and take-off, the required number of aircraft flew out immediately.
- 247. During the Meiktila-Rangoon advance of 4 Corps, the number of strips constructed was greater than that during a corresponding period at any other time, yet none of the strips was refused by the squadrons. When the strips could be built more than 500 yards long, it was possible to evacuate two sitting cases in one sortie, but there were few opportunities for this.
- 248. All the squadron commanders understood their primary role to be casualty evacuation. But important secondary tasks were also performed. Except in the case of the fly-in of important medical supplies, these secondary tasks were never allowed to interfere with the evacuation of casualties.
- 249. The secondary tasks undertaken were:—
 - (a) The emergency flying-in of medical supplies, especially whole blood.
 - (b) Flying-in reinforcements, mail, food, ammunition and items of personal kit. These trips were always part of an evacuation sortie.
 - (c) Transporting V.I.P.s. within the Corps area.
 - (d) Spotting for artillery.
 - (e) Dropping and picking up messages.
 - (f) Reconnaissance flights.
- 250. The importance of the evacuation of casualties relative to other duties was, indeed,

interesting. The total trips by one squadron over a given period of one month, when activity was intense, was 12,017 of which 9,238 were casualty evacuation flights, or 77 per cent. of the total, as against 2,779 secondary missions.

251. In an analysis of the secondary tasks undertaken by these aircraft, the flying-in of reinforcements proved exceedingly valuable, since these missions could be combined readily with the collection of a casualty, while most of the other missions could not. In various ten-day periods, for example, the total number of casualties evacuated was 7,705 as against 3,345 reinforcements flown in. The percentage of evacuated casualties which were replaced by reinforcements was therefore 43.

Evacuating Casualties from a Corps in Action.

- 252. For the peak period March, 1945, a squadron of 32 American light aircraft operated under 33 Corps.
- 253. During this period, all the cases required to be evacuated were taken out by air. No cases were evacuated by road or rail. The aircraft were based at Shwebo during the first half of the month and flew as far as Ondaw, 35 miles away. In the second half of the month, the aircraft were based at Ondaw and flew as far as Wundwin, 65 miles away. The numbers of ground forces evacuated and the hours flown in three ten-day periods were as follows:—

			Number	Hours
Date			Evacuated	Flown
1-11 March		•••	1,793	1,604
11-22 March		•••	1,464	1,431
21—31 March	• • •	•••	1,362	1,688
m-4-1		i.	4.610	4 500
Total	•••	•••	4,619	4,723
				S-2-3-3

Maximum distance between base and forward	
strip (miles)	65
Minimum distance between base and forward	
strip (miles)	35
Average per cent. aircraft in commission daily	96-7
Average number of aircraft in commission daily	30.6
Average number of hours flown per plane per	
day	5.2
Average number of hours flown per plane per	
month	153
Average number of cases evacuated per plane	
per day	5
Average number of hours flown per day	157
Average number of cases evacuated per day	154
Maximum number of flying hours a pilot a day	9

- 254. The above achievement by this squadron was a record for the American squadrons in the Group. The effort was believed to be near the maximum which any squadron could reach in similar circumstances.
- 255. During the period some of the pilots flew for nine hours a day for five consecutive days, and made up seven sorties in one day on several occasions. This intensification of activity for short periods could not have been achieved without the very high level of maintenance attained, nor could it have been exceeded without putting too great a strain on the pilots or replacing some of the aircraft. Three of the pilots had to be replaced before the end of the operation owing to exhaustion, and 14 aircraft had to be replaced when the squadron came out. The deterioration of the engines, however, cannot be ascribed simply to this operation, as the aircraft had had three months of operations before operating with