The Air Age in the Ethiopian Empire, 1955-56¹ GORDON B. SCHILZ, Southeastern State College, Durant

Until Mussolini's aircraft spread poison gas and incendiary bombs over Ethiopia's villages and armies in 1936, the airplane was an uncommon sight in isolated Ethiopia. Aircraft had become familiar in Eritrea due to the long build-up of the Italians there for the invasion southward.

The Empire of Ethiopia (Ethiopia and federated Eritrea, 1952) stretches roughly 1,000 miles each way. Our planimetric measurement yields approximately 450,000 square miles, considerably larger than the Atlas figures. Such an area would approximate Texas, Oklahoma, Louisiana, Arkansas, and one-sixth of Missouri.

This Empire area has been independent since the time of legendary history. In modern times, or since 1850, it has survived partly by its own prowess; partly by the dog-in-the-manger attitude of Britain, France and Italy; and partly due to the geographic elements of the rugged terrain of the interior and surrounding deserts.

The Emperor, Haile Selassie I, as a result (1) of the Italian aerial success, (2) the importance of air power in World War II, observed while he was in England, and (3) the desire to bring the peaceful benefits of air transport to his country, organized the Ethiopian Airlines in 1946 (TWA cooperating).

In 1955, Ethiopia Airlines serviced 23 domestic airfields with DC-3's. International runs by Convair service reached Athens, Cairo, Khartoum. Nairobi, Aden and Jibuti. The international service was to be upgraded in quality by 1957-58 through the addition of DC-6 and Constellation aircraft.

Either map shows, by width of flow line between airfields, the intensity of service. In 1955, Aden had 19 flights in or out per week by Ethiopian Airlines, Athens 6, and Nairobi 5. Domestic services vary from once a week to 19 flights. Most domestic flights originate and terminate in Addis Abeba on the same day.

The map "Passenger Movement," by the size of circles indicates the 7 outstanding traffic centers. In first place by far is Addis Abeba, 44,617 passengers, followed by Asmara, 13,691, and then Gwore, Jima, Dire Dewa. and Aden, about 5,000 each.

The map "Freight Movement" indicates 3 cities as most important, Addis Abeba, Dire Dewa, and Aden. The four in second place are Mizan Teferi, Gwore, Jima, and Asmara. Commodities accounting for the importance of the first 3 are numerous small volume high-priced international items with the leading item, chat or kat, exported from Dire Dewa to Aden. Of the four in second place, the three in southwest Ethiopia represent the volume of coffee moved to Addis Abeba, and manufactured items returned.

Ethiopians are using their own airline. The annual report of the airline lists revenues as derived: passenger and baggage, 64.3%, freight. 25.9%, mail 2.3%, and others 7.5%. In the ten years of operation, annual total passengers carried has increased from 8,000 to 67,023, and freight from 800,000 kilos to 4,855,000 kilos (a kilo is 2.2 lbs.). The demand was such that six new air strips were opened in 1956.

The greatly different elevations of the airfields; Asab at sea level to Debre Tabor, 9,200 feet, present air density problems for every landing. Surrounding deserts are supply areas for dust and sand found in the air. Cruising levels are 8 to 16 thousand feet, necessitated by terrain and cloud conditions. These are some of the factors accounting for a much higher use-maintenance cost for aircraft engines in Ethiopia.

The Ethiopians are seeing other planes than those of their airline. A small air force is being trained. To combat locust invasions, Piper cubs were brought in to spray poison. In 1956, the author brought in a helicopter to reach and map otherwise inaccessible and little known sub-provinces.

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