

## Letters To The Editor

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### INCIDENCE OF FOG OVER BANGALORE AIRFIELD

Bangalore Hindusthan Aircraft Ltd. (HAL) airfield (Lat.  $12^{\circ}57'N$ , Long.  $77^{\circ}40'E$ ) is situated on the Mysore Plateau at an altitude of 2937 ft above m.s.l. in the heart of the south Indian Peninsula about 185 miles from the sea towards the east and west. It is six and half miles eastsoutheast of Bangalore city railway station and three-fourth of a mile north of Bellandur tank.

Data for eight complete years 1949 to 1956 obtained from the Monthly Meteorological Registers and Aviation Current Weather Registers have been utilised in this study of fog at Bangalore HAL airfield.

Table 1 indicates the distribution of number of days with fog in different months during the eight years 1949 to 1956. It is seen from this table that the period May to August is completely free from occurrence of fog while in March, April, September and October, fog may occur only on a few occasions. The period November to February is the fog-season for this airfield. December and January are the foggiest months with an average of about 4 foggy days per month.

Table 2 indicates the hourly distribution of fog over the airfield. It is seen from this table that fog occurs over the airfield mostly during the hours 0600—0700 and 0700—0800 IST and to a lesser extent during 0500—0600 and 0800—0900 IST. Occasions of fog before 0500 IST and after 0900 IST are rare.

Tables 3 and 4 give the distribution of times of commencement and dissipation of fog. It is seen that fog commences mostly during 0600—0700 and 0700—0800 and

occasionally during 0500—0600 IST. On rare occasions fog commences before 0400 IST and persists after 0800 IST. Fog dissipates on most days before 0900 IST and on some occasions even before 0700 IST. No occasion of persistence of fog till 1000 IST was found during the period under study.

Table 3(a) gives the frequencies of commencement of fog within  $\frac{1}{2}$ ,  $\frac{1}{2}-1$ ,  $1\frac{1}{2}-2$ , 2—3 hours before as well as after sunrise. It is seen from this table that fog commences generally before sunrise or within half-an-hour after sunrise.

Table 5 gives the distribution of duration of fog. It is seen that the most frequent duration of fog is between 1 and 2 hours. On some occasion, it disappeared within an hour and on some others lasted for 2-3 hours. No fog had, however, lasted for more than 5 hours in the period investigated.

It is of interest to mention incidentally in this connection that on 18 out of a total of 101 occasions during the period under consideration, fog occurred at the airfield on consecutive days.

Table 6 indicates the number of occasions when there was simultaneous occurrence of fog over Bangalore airfield and over Bangalore city (Central Observatory). It is seen that fog occurs over Bangalore city on 40 per cent of days of its occurrence over Bangalore airfield. And on 60 per cent of days of fog over Bangalore city, fog occurred at Bangalore airfield also. However, there was no indication that fog which occurs at either Bangalore airfield or at the city is followed by fog at the other station after a certain time-lag. On 50 per cent of the days of simultaneous occurrence of fog over Bangalore





TABLE 5

Distribution of duration of fog

Duration (hr)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Less than 1	7	3	2	1	—	—	—	—	1	—	6	7	27
1—2	15	3	1	—	—	—	—	—	2	1	4	16	42
2—3	6	3	1	—	—	—	—	—	—	2	2	7	21
3—4	1	—	1	—	—	—	—	—	—	—	1	5	8
4—5	1	—	—	—	—	—	—	—	—	—	2	—	3

TABLE 6

Number of occasions when there was a simultaneous occurrence of fog over Bangalore airfield and Bangalore city

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1949	1	—	—	—	—	—	—	—	—	—	—	—	1
1950	2	—	—	—	—	—	—	—	—	—	—	—	2
1951	—	—	—	—	—	—	—	—	—	—	1	2	3
1952	1	—	—	—	—	—	—	—	—	—	1	3	5
1953	3	—	1	—	—	—	—	—	—	—	2	3	9
1954	2	1	—	—	—	—	—	—	—	—	—	2	5
1955	1	2	1	—	—	—	—	—	—	—	1	3	8
1956	2	—	1	—	—	—	—	—	—	1	1	2	7
Total	12	3	3	—	—	—	—	—	—	1	6	15	40 (out of 101 days)