

PART B

HOURLY OBSERVATIONS

CHAPTER 9

OBSERVING AND REPORTING PRIORITIES

9.1 GENERAL. Selected meteorological observing stations are designated to take weather observations and supply reports, in a form designed primarily to meet the requirements of flight personnel and other users. These reports are called Hourly Observations. The observers assigned to take Hourly Observations shall keep a close watch on the weather and report significant changes without delay. The continuity of the scheduled observing program shall be maintained at all times so that discontinuities will not occur in the records.

9.2 SCHEDULED OBSERVATIONS. Hourly Observations shall be taken each hour on the hour. Ideally all elements should be observed exactly at the hour; however, in practice, a certain interval of time is required to make an observation. The barometer shall be read exactly at the hour. Other elements shall be observed in the few minutes preceding the hour and as close as possible to the hour. The computations, coding and recording of Hourly Observations shall be done immediately after the hour. The following observing schedule will best conform to the principles laid down above.

9.2.1 When the Hourly Observation Only is Required:

TIME SCHEDULE		DUTY
From	Until	
Hour minus 6 minutes	Hour	Observe all weather elements except pressure
Hour	Hour + 1 minute	Read the barometer and the barograph
Hour + 1 minute	Hour + 4 minutes	Make all necessary entries on Form 63-2322 and prepare the Hourly Observation
Hour	Hour + 7 minutes	Input the Hourly Observation for collection

9.2.2 When Both Hourly and Synoptic Observations are Required:

TIME SCHEDULE		DUTY
From	Until	
Hour minus 10 minutes	Hour minus 3 minutes	Observe all weather elements except pressure
Hour minus 3 minutes	Hour	Make computations and necessary entries on Form 63-2322 in Sections I, II and III
Hour	Hour + 1 minute	Read the barometer and the barograph
Hour + 1 minute	Hour + 4 minutes	Complete the necessary entries on Form 63-2322 in Sections I and II
Hour	Hour + 7 minutes	Input the Hourly Observation for collection
Hour + 7 minutes	Hour + 12 minutes	Complete necessary entries on Form 63-2322, Section III and input the Synoptic Observation for collection

9.2.3 The above tables indicate the order of observing and recording weather observations, but the times shown need not be followed rigidly, except for reading the barometer. Under easy observing conditions it may be possible to commence the observation closer to the hour than the times shown. When weather conditions are difficult it may be necessary to begin the observation earlier, in order to complete it in time to take the pressure reading at the hour.

9.2.4 The exact order in which the weather elements (other than the pressure) are to be observed is not rigidly specified. This order will depend somewhat on the location of the instruments and on weather conditions. It is suggested that the elements which fluctuate most rapidly (ceiling and visibility), be left as late as possible. Thus under conditions of low ceiling and visibility, these elements would be best observed just before the barometer is read.

9.2.5 All stations shall conform to these schedules of observing, unless special permission to deviate is obtained from the ADMA.

9.2.6 When weather conditions change while the observation is being taken, the scheduled report shall describe, as nearly as possible, the conditions which existed just prior to the reading of the barometer (see also para. 10.3.3). When significant weather changes occur after the barometer has been read and prior to the transmission of the scheduled report, transmit the scheduled report, followed by the transmission of a special observation as soon as possible thereafter.

Examples: 1) Light rain began at 11:57; record R-/11:57 in columns 2 and 3; indicate R- as weather in an RS for 1200Z.

2) Light snow shower began at 18:03Z; record SW-/18:03 in columns 2 and 3; SA (indicating no snow) for 1800Z was offered at 18:04; an SP, indicating SW- and time 1803, was offered at 18:07.

9.2.7 It should be noted that both the hourly observation and the synoptic observation aim to describe identical conditions at the hour. However, this is only possible insofar as the codes permit; for example, the synoptic observation reports a ten-minute mean wind direction and speed, whereas the hourly observation for the same time reports a two-minute mean wind direction and speed.

9.3 AIRCRAFT ACCIDENTS. Procedures for taking Accident Check Observations and protection of the official record are given in para. 10.3.7.