activity) when first observed may be included in weather warnings and statements issued by cognizant NWS offices rather than in supplementary data reports. The same elements may be reported in both SDO's and aviation observations from some sites (see enclosures).

In the future, non-Federal observers (volunteers, Cooperative Observers, etc.) are expected to participate as members of the supplementary data network. Their reports will focus on snow depth, snowfall amount, hail and ice pellet occurrences. It is expected that a subset of volunteer observers will report water equivalent of snow on the ground.

Susan F. Zevin,

Deputy Assistant Administrator for Operations.

Report Format and Content

The information in supplementary data reports will follow the syntax and abbreviations used in Federal Meteorological Handbook Number 1 for Surface Observations (FMH–1). (FMH–2 for synoptic cloud reports) where practical. Supplementary data reports differ from surface aviation observations in the following ways:

- Only a limited set of observed elements is included in supplementary data reports. A given supplementary report may contain one or several elements.
- Supplementary data reports are not issued on an hourly basis. Time-scheduled SCDs are issued at main synoptic hours or at other designated hours of the day depending on the variable(s) being reported. Event-driven SDOs are issued when a significant phenomenon is first observed. A follow-up ''termination'' SDO will be issued after the cessation of certain events.
- Some SDOs will contain a ''/'', solidus remarks separator. The purpose of the remarks separator is to help computer decoders differentiate between decodable (parsable) remarks and remarks not readily amendable to decoding. SCDs will *not* inclde the ''/'' remarks separator because all remarks in SCDs are decodable.

Supplementary data reports are encoded as follows:

SID—TYPE—(COR—)TIME—WX/—Decodable RMKS—/—Other RMKS (''—'' indicates a required space and ''/'' indicates a required solidus. The ''/'' will appear in an observation if and only if one or more ''WX'' elements are reported *and* are followed by remarks. The ''/'' remarks separator will appear in an SDO, only if, the SDO contains both decodable *and* noncodable remarks.

SID—Station identifier (3 to 5 alphanumeric characters).

TYPE—Type of observation (either SCD or SDO). If the observation is a correction to a previously disseminated SCD or SDO, the contraction COR will follow the type of observation (in which case the time (TIME) will be the time of the observation being corrected).

TIME—Time of observation in hours and minutes UTC [0000 * * * 2359].

WX—Weather and/or obstructions to vision. This field will be from 1 to 15 characters in length including the precipitation intensity symbol (−,+). The elements to be reported in the ''WX'' field are given in Table 1 of this guide. Contractions for precipitation types are given in Table 2; contractions for obstructions to vision are in Table 3.

Decodable RMKS, Other RMKS—Remarks are separated from the ''WX'' group with a solidus and a space. If no ''WX'' is reported, the remarks are preceded with a space after the time (TIME) element.

SCD remarks are encoded in the following order:

$8NN_hC_LhC_MC_H$—Total cloud cover and synoptic cloud types

931nnn—Depth of new snow (snowfall)

933RRR—Water equivalent of snow on the ground

4/sss—Depth of snow on ground

98xxx—Duration of sunshine

$7R_{24}R_{24}R_{24}R_{24}$—Calendar day total precipitation (from designated sites)

$4s_nT_xT_xT_xs_nT_nT_nT_n$—Calendar day maximum and minimum temperature (from designated sites)

NIL—Nothing to report

SDO remarks are encoded in the following order:

Temination reports for ''WX'' elements (e.g., END IP)

SNOINCR x/x—Snow increasing rapidly

HLSTO x—Size of largest hailstone observed

'' / '' remarks separator

Other SDO remarks when considered significant by the on-site staff:

Local variation in visibility (e.g., VSBY N2; F BANK N–E2) (designated stations)

Virga—Precipitation evaporating before reaching ground (designated stations)

Precipitation not at station (e.g., RWU SW; SU OVR MTNS N) (designated stations)

Clouds above 12,000 feet (types and/or layers) (designated stations)

Distant clouds obscuring mountains (designated stations)

Other meteorological information considered significant, such as blowing volcanic ash

The SDO ''WX'' group, remarks of snow increasing rapidly (SNOINCR), hailstorms (HLSTO), and termination reports for ''WX'' elements are considered decodable.

Initiation *and* termination reports will be issued for selected ''WX'' elements (those listed in Table 2 of this guide). An exception is hail, for which only an initiation report will be issued. Termination reports will be issued for any weather and/or obstructions to vision previously reported in the ''WX'' field of an SDO when the event is determined to have ended. Termination reports are not required for information reported in SDO remarks unless designated by NWS regional headquarters.

- The initiation report for a ''WX'' element is implicit in the ''WX'' field (e.g., ''MCI SDO 1325 BS'' is an initiation report for blowing snow). The initiation report for other significant events carries the information in the SDO remarks section (e.g., ''MCI SDO 1325 BD/ RWU SW'' may be an initiation report for distant rain showers. The blowing dust, previously reported, continues).
- Termination reports contain the key word ''END'' followed by a space and a description of the event which ended. All termination information, even for a ''WX'' element, is considered to be in the remarks category. Termination information for ''WX'' elements precedes any '' / '' remarks separator (e.g., ''MCI SDO 1445 END BD / END RWU SW'').
- Termination reports for items listed under ''other SDO remarks when considered significant by the on-site staff'' can have several meanings: (1) the event ended, (2) the event is no longer considered significant, but it may still exist, or (3) because of darkness, it is not possible to determine if the event still exists.

Plain language remarks may at times be necessary to clarify changing local conditions. For example, if a fog bank previously reported to the north (e.g., ''ANC SDO 1205 F BANK N2'') moves over the airport, ''ANC SDO 1330 F BANK MOVD OVR ARPT'' might be subsequently reported.

Location of phenomena within 10 miles of the station will be reported as ''VCNTY STN,'' followed by the direction from the station. Phenomena between 10 and 30 miles of the station will be located by direction from the station. Phenomena beyond 30 miles will be reported as ''DSNT,'' followed by the direction from the station.

If there are no coded remarks or weather to report in a scheduled SCD,