Example of a Winds and Temperature Aloft Forecast

DATA BASED ON 151200Z

VALID 151800Z FOR USE 1700-2100Z TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
ALA			2420	2635–08	2535–18	2444–30	245945	246755	246862
AMA		2714	2725+00	2625–04	2531–15	2542–27	265842	256352	256762
DEN			2321–04	2532–08	2434–19	2441–31	235347	236056	236262
HLC		1707–01	2113–03	2219–07	2330–17	2435–30	244145	244854	245561
MKC	0507	2006+03	2215–01	2322–06	2338–17	2348–29	236143	237252	238160
STL	2113	2325+07	2332+02	2339–04	2356–16	2373–27	239440	730649	731960

Decoding

1. A four-digit group shows wind direction, in reference to true north, and wind speed.

    a. The first two digits give direction in tens of degrees, and the second two digits are the wind speed in knots.

    b. Look at the St. Louis (STL) forecast for 3,000 ft. The group 2113 means the wind is from 210° true at 13 kt.

2. A six-digit group includes forecast temperatures.

    a. In the STL forecast, the coded group for 9,000 ft. is 2332+02. The wind is from 230° true at 32 kt., and the temperature is plus 2°C.

3. If the wind speed is forecast to be from 100 to 199 kt., the forecaster will add 50 to the wind direction and subtract 100 from the wind speed. To decode, you must subtract 50 from the wind direction and add 100 to the wind speed.

    a. In the STL forecast, the coded group at 39,000 ft. is 731960. The wind is from 230° true (73 − 50 = 23) at 119 kt. (100 + 19 = 119), and the temperature is −60°C.

    b. If the wind direction is between 51 and 86, the wind speed will be 100 kt. or more.

4. If the wind speed is forecast to be 200 kt. or greater, the wind group is coded at 199 kt.

    a. EXAMPLE: 7799 is decoded as 270° true at 199 kt. or greater.

5. When the forecast speed is less than 5 kt., the coded group is 9900 and is read "LIGHT AND VARIABLE."