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Operations and Services Upper Air Program, NWSPD 10-1400 Rawinsonde Observations, NWS Observing Handbook No. 10

RAWIN-THEODOLITE OPTICAL COMPARATIVE OBSERVATIONS

NOTICE: This publication is available at: <u>http://www.nws.noaa.gov/directives/</u>.

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SUMMARY OF REVISIONS: This supplement supersedes Regional Operations Manual Letter (ROML) W-4-01, filed with B-40 dated May 21, 2001.

Signed Vickie Nadolski Director, Western Region 07/27/04

Date

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1. <u>References</u>: National Weather Service Observing Handbook No. 10, Chapter 11, Paragraphs 11.3.4.1 through 11.3.4.3.

2. <u>Purpose</u>: This Supplement establishes procedures and assigns responsibility for completing quarterly RAWIN-Theodolite Comparatives at Western Region Upper Air offices.

3. <u>Description</u>: Rawinsonde Station Supervisors must make every effort to ensure RAWIN-Theodolite Optical Comparative Observations are taken each quarter. National Weather Service Observing Handbook No. 10, Chapter 11, Paragraphs 11.3.4.1 through 11.3.4.3 provide reasons for this requirement and procedures to follow.

The Station Supervisor is responsible for selecting the proper time and designating personnel to take the comparative. If it's necessary to accomplish this when personnel are not available through normal scheduling, overtime may be authorized for releasing and tracking purposes. The actual computation should be made during regular hours on some other day without use of overtime. Theodolite general test checks shall be accomplished before comparisons are taken.

RMS values of 0.050 or greater at ART2 stations, and .070 or greater at ART1 stations shall be recorded on WS Form A-26, EMRS Maintenance Record, and the assigned Electronics Technician (ET) shall be notified. When necessary checks or repairs have been completed, the ET will advise the MIC so another comparison can be taken. The current RMS value should be reported on the B-29 Rawinsonde report.

An optical comparison shall also be taken after major component replacement or tracking alignment.

At stations where favorable days for comparatives are rare, the quarterly requirement should be met at the first opportunity.

If circumstances do not permit a comparative observation in a given quarter, a report describing the reasons shall be forwarded to WRH, Observing Systems Program Manager. Use NWS Form B-17 (RAWIN-Theodolite Comparison) dated the last day of the month for the report. A note to the effect that no comparative was made shall also be entered on the first NWS Form B-29 (Weekly Rawinsonde Report) submitted after the close of the month.