Time and Frequency:  
A Bibliography of NBS Literature  
Published January 1971 - December 1972

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National Bureau of Standards Special Publication 350, Supplement 1

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SECTION A

TIME AND FREQUENCY STANDARDS


* Nos. refer to designation in SP-350.
* Letters in parentheses indicate applicability to additional sections.


RISLEY, A. S., "The physical basis of atomic frequency standards," NAT. BUR. STAND. (U.S.), TECH. NOTE 399, 54 pages (USGPO, C13.46:399, $0.60, April 1971).


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* Nos. refer to designation in SP-350.
DISTRIBUTION/RECEPTION OF TIME AND FREQUENCY SIGNALS

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[C-72a] ALLAN, D. W., BLAIR, B. E., DAVIS, D. D., and MACHLAN, H. E., "Precision and accuracy of remote synchronization via network television broadcasts, Loran-C, and portable clocks," METROLOGIA, 8, No. 2, pp. 64-72 (April 1972);


* Nos. refer to designation in SP-350.


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SECTION D

STATISTICS OF TIME AND FREQUENCY ANALYSES,
FREQUENCY STABILITY, LABORATORY MEASUREMENTS

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INSTRUM. AN MEAS., IM-20, No. 2, pp. 105-120 (May 1971).

[D-19] BARNES, J. A., and ARVIS, S., "Efficient numerical and analog modeling of
flicker noise process." NAT. BUR. STAND. (U.S.), TECH. NOTE 604,
22 pages (USGPO, C13.46:604, $0.35, June 1971).

(Unpublished report).

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[D21] STANLEY, J. T., and MILTON, J. B., "Basic laboratory methods for measure-
ment or comparison of frequencies and time intervals," (Unpublished report).

* Nos. refer to designation in SP-350.
SECTION E
GENERAL, SUMMARY, AND STATUS REPORTS

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Nos. refer to designation in SP-350.
SECTION F

FUTURE TRENDS IN TIME-FREQUENCY METROLOGY

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[F-1] FINNEGAN, T. F., DENENSTEIN, A., and LANGENBERG, D. N., "ac-
Josephson-effect determination of e/h: A standard of electrochemical potential
based on macroscopic quantum phase coherence in superconductors," 
PHYS. REV., B4, No. 5, pp. 1487-1522 (September 1971).

[F-2] KAMPER, R. A., and ZIMMERMANN, J. E., "Noise thermometry with the 

[F-3] MCDONALD, D. G., RISLEY, A. S., CUPP, J. D., and EVENSON, K. M., 
"Harmonic mixing of microwave and far-infrared laser radiations using a 
Josephson junction," APPL. PHYS. LETT., 18, No. 4, pp. 164-164
(February 15, 1971).

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frequency and the speed of light," PHYS. REV. LETT., 29, No. 3, 
pp. 189-192 (July 17, 1972).

[F-5] (A) HALFORD, D., "Infrared-microwave frequency synthesis design: Some relevant 
conceptual noise aspects," Proceedings of the Frequency Standards and 
Metrology Seminar (Quebec, Canada, Aug. 30-Sept. 1, 1971), pp. 431-466
(Quantum Electronics Lab., Dept. of Elect. Eng., Laval University, Quebec, 
Canada, $10.00, 1972).

[F-6] (A) HALFORD, D., HELLWIG, H., and WELLS, J. S., "Progress and feasibility for 
a unified standard for frequency, time, and length," PROC. IEEE (LETT.), 

[F-7] MCDONALD, D. G., RISLEY, A. S., CUPP, J. D., and EVENSON, K. M., "Four-
hundredth-order harmonic mixing of microwave and infrared laser radiation 
using a Josephson junction and a maser," APPL. PHYS. LETT., 20, No. 8, 

[F-8] RISLEY, A. S., "The Josephson junction as applied to the measure 
ment of the 
frequencies of several laser lines," Proceedings of the Frequency Standards 
and Metrology Seminar (Quebec, Canada, Aug. 30-Sept. 1, 1971), pp. 325-
328 (Quantum Electronics Lab., Dept. of Elect. Eng., Laval University, 
Quebec, Canada, $10.00, 1972).

[F-9] WELLS, J. S., EVENSON, K. M., DAY, G. W., and HALFORD, D., "Role of 
infrared frequency synthesis in metrology," PROC. IEEE (LETT.), 60, 
No. 5, pp. 621-623 (May 1972).
SECTION G
SELECTED NON-NBS TIME AND FREQUENCY PAPERS
PUBLISHED 1971-1972

The following selected bibliography is provided within the framework of the NBS publication outline for calendar years 1971 and 1972. The selection represents contributions to the time and frequency field on the basis of their value in terms of survey, tutorial nature, originality, and availability; as such they document the scope and depth of work in the field. The selection cannot be exhaustive; however, we welcome recommendations for inclusion in future listings.

The material is organized as follows:

G.1 Time and Frequency Standards
G.2 Time Scales, Time
G.3 Distribution/Reception of Time and Frequency Signals
G.4 Statistics of Time and Frequency Analyses, Frequency Stability, Laboratory Measurements
G.5 General, Summary, and Status Reports
G.6 Future Trends in Time-Frequency Metrology