

**ERRATA****CHARACTERIZATION OF CLOCKS AND OSCILLATORS**  
**NIST Technical Note 1337**

The additional errata noted on this page represent a continuation of the Notes and Errata in the Appendix (page TN-336).

38. Page TN-30

There are two errors in eq 6.6. The equation for Flicker PM is missing a square root in the exponential. It should read

$$\text{Flicker PM} \quad \text{d.f.} = \exp\left(\ln\frac{N-1}{2n} \ln\frac{(2n+1)(N-1)}{4}\right)^{1/2}.$$

In the equation for Flicker FM, the numerator of the upper term should read  $2(N-2)^2$  instead of  $2(N-2)$ . The equation should read

$$\text{Flicker FM} \quad \text{d.f.} = \begin{cases} \frac{2(N-2)^2}{2.3N-4.9}, & \text{for } n=1 \\ \frac{5N^2}{4n(N+3n)}, & \text{for } n \geq 2 \end{cases}$$

39. Page TN-85

There are two errors in the Flicker phase term of Table 12-4. The small  $n$  in the the denominator of the first logarithmic term should be an  $m$ , and the whole quantity in the square bracket should have an exponent of  $1/2$ . The equation should read

$$\text{Flicker phase} \quad \exp\left[\ln\left(\frac{N-1}{2m}\right) \ln\left(\frac{(2m+1)(N-1)}{4}\right)\right]^{1/2}.$$

1/19/91  
W. Riley

Another possible typo  
in NIST Technical Note 1337

page TN-85

Table 12-4

Flicker frequency term  
for  $m = 1$

$(N-2)$  term in numerator  
should be  $(N-2)^2$   
so that  $df$  becomes:

$$\frac{2(N-2)^2}{2.3N - 4.9}$$

(see TN-30 Eqn 6.5)

Further Corrections to NIST Tech Note 1337

TN-11

Fig 2       $-\frac{1}{n}$  on lower curve  
should be  $\frac{1}{n}$   
(no minus sign)

TN-279

Expression for A is wrong  
Missing N after 2nd 3  
See correct expression on p. TN-281

DATE: 12/10/91

TO: J. Barnes

FROM: W. Riley

SUBJECT: Items we discussed at the PTTI Meeting last week

- (1) Typo in J.A. Barnes, "The Measurement of Linear Drift in Oscillators", Proc. 15th PTTI Meeting, 1983, p. 566 (p. TN-279 of NIST Technical Note 1337):

The expression for A is missing the term N after the 2nd 3. See p. 568 (TN-281) for the correct expression.

