Letters

Comments on Robert W. Edmonds' "The Use of Echo Time-Weighting to Derive Oscilloscope Graticules for Rating Television Transmission Performance"

by HANS SCHMID

In the above paper, published in the *Journal* in June 1976 (pages 393 to 396), R. W. Edmonds proposes a monochrome graticule for "measuring the short-time waveform performance of broadcast television systems." (My paper in the same issue gives further details on this subject.) Figures 1 and 2 which accompany this letter show a waveform and picture monitor display of an undistorted live television camera signal and the same signal with a distortion that falls within R. W. Edmonds proposed graticule. These figures will enable the reader to form an opinion about this proposal.

The reader will note that a severely blurred picture results even though the waveform distortion falls within R. W. Edmonds' proposed 5% limits; the actual difference between the monitor displays is even greater than can be reproduced in print. In my opinion, such a picture is too blurred, and most broadcasters would call it UFB (unfit for broadcasting).

Letter submitted on 17 February 1977 by Hans Schmid, American Broadcasting Corp., Engineering Laboratory, 45 W. 66 St., New York, NY 10023.

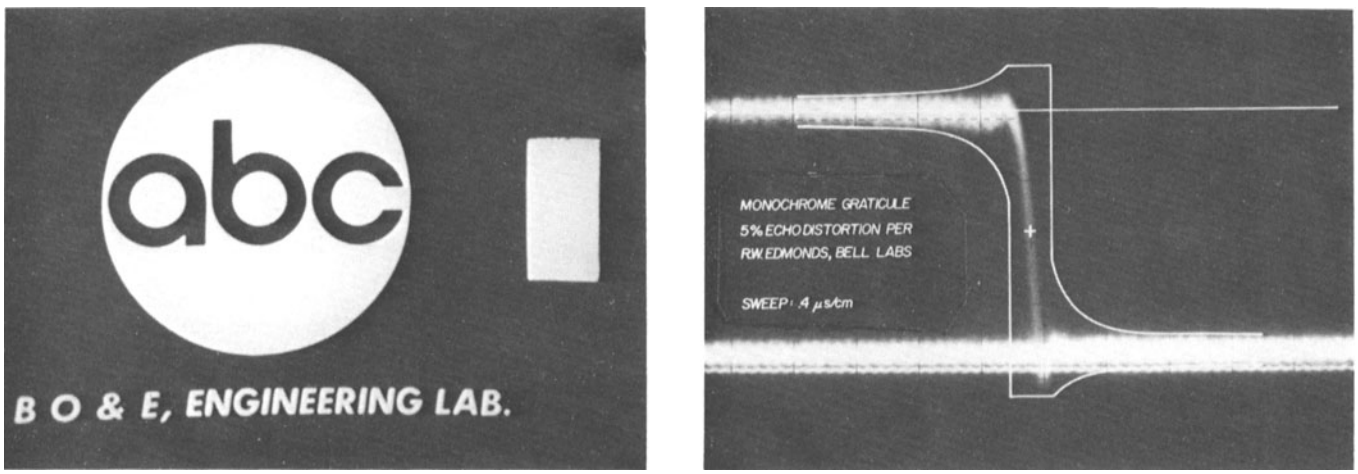

Fig. 1. Waveform and picture monitor displays of an undistorted live camera signal.

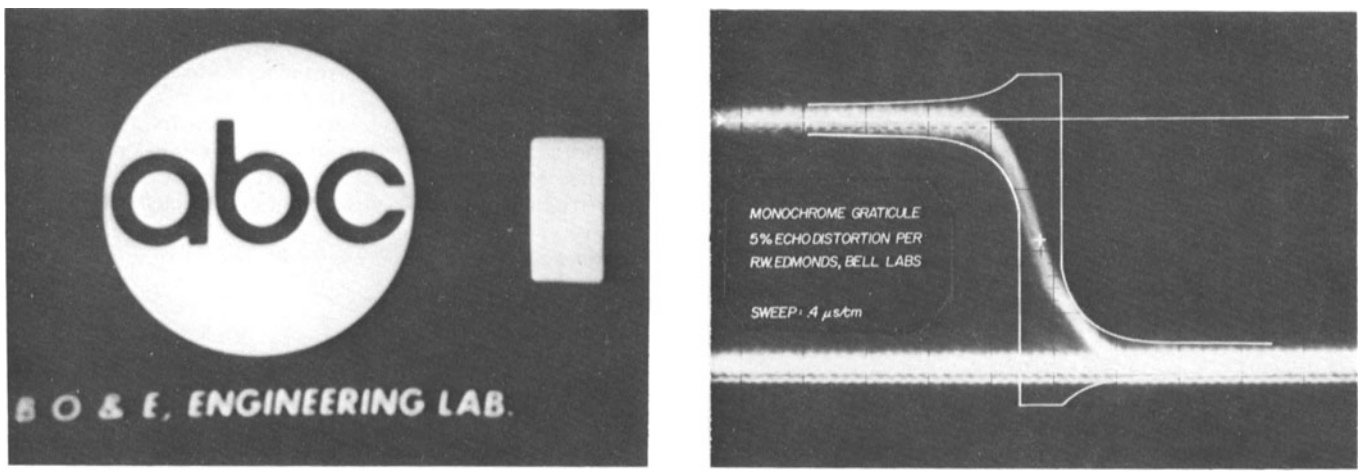

Fig. 2. Waveform and picture monitor displays of a live camera signal distorted within limits of Edmonds' graticule.

Reply to the Above Letter

By ROBERT W. EDMONDS

Mr. Schmid has evidently misunderstood the thrust of my paper. I did not propose specific limits for judging the acceptability of a distorted video signal. The purpose of my paper, as stated therein, was to describe a method for deriving oscilloscope graticules based on subjective time-weighting information. Five-percent and two-percent echo boundaries were derived and indicated to be "examples only," not to be construed as permissible limits of distortion. Mr. Schmid's correspondence indicates he believes the five-percent boundaries to be too lax for good monochrome quality. That may indeed be true. The specific limits of acceptability to appear on an oscilloscope graticule intended as a standard of acceptance are a matter to be decided by the appropriate industry-wide study group.

Reply submitted 3 March 1977 by Robert W. Edmonds, Bell Telephone Laboratories, Holmdel, NJ 07733.