DATE:  Tuesday, October 10, 2006
TIME:  7:30 PM
LOCATION:  WKBD/WWJ-TV (CBS)
           26905 W. 11 Mile Rd., Southfield, Michigan 48033
           (248) 350-5050
[SMPTE]

SPEAKER:  Karl J. Kuhn
          Video Systems Application Engineer
          Tektronix, Inc.

SUBJECT:  Audio and Video Testing in a File Based Environment

This technical presentation will be a tutorial on the challenges of
Quality Control in Compressed Digital Content - with various
different standards, resolutions, formats, color spaces, meta data.
Many parameters must be correctly specified, if the content is going
to be played and reach the end-viewer correctly.

This includes not only obvious parameters such as video standard
and system transmission bit-rates, but also constraints specific to the
playout system, e.g. that 30 seconds of black screen and audio tone
are expected at the start of each video sequence (or conversely, not
expected).

Playing the video and hoping to spot obvious visual/audio
impairments and artifacts is not enough - problems can easily be
missed or marginal quality issues not seen/heard. The person
inspecting the video before playout also has to know precisely what
format, resolution, frame rate etc. are required, and be able to detect these. The result is that manual inspection is prone to error and inconsistent. Moreover, manual inspection does not look inside the encoding and check that the correct encoding parameters have been used - for example, have the packet size, GOP structure, syntax, and program IDs been set correctly?

There will a demonstration at the conclusion of this paper.

**Karl Kuhn** is a Video Systems Application Engineer supporting analog/digital video and audio, compression and transmission. He has been with Tektronix for nearly seven years. Previously, he was the lead video test engineer for IBM's Digital Video Development lab in Bethesda, Md. A holder of four patents, Karl is the section chair and past secretary-treasurer for the Washington, DC section of SMPTE.

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**Managers' Dinner** will be at 5:30 PM at **Steak & Ale**, 27590 Orchard Lake Road (at 12 Mile), Farmington Hills. (248) 476-8440. [Map] All are welcome to join us.

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