# Society of Motion Picture and Television Engineers
## Detroit Section Meeting Notice
## October 2006

SMPTE

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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
[Map]

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

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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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Bookmark our web site to check for any last minute changes in the meeting schedule, or for the latest on upcoming meetings:

http://www.smpte.org/sections_chapters/detroit/

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To obtain the latest news of the Detroit Section via e-mail, including meeting notices, last minute changes or other items of interest, please visit the Detroit Section web page, visit http://www.yahoogroups.com/subscribe.cgi/smpte_detroit, or send a blank e-mail message to smpte_detroit-subscribe@yahoogroups.com.

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Guests and Non-Members are Welcome