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that requires more money for accurate reproduction than the task for which it was designed can generate. Three factors create this condition in HDTV production — high equipment costs due to multiple standards, the cost of transcoding from high definition to existing distribution channels and production compatibility with 35mm. film.(3)

Pantuso clearly explains in this paper the financial impediments to the growth of HD as a broadcast format at this time, taking the reader step-by-step through the impediments and offering some constructive solutions. He introduces a method whereby HD imaging could be used as an adjunct to 35mm film for special effects and multi-general post-production techniques.

Pantuso supposes that if HD imaging systems for high-quality mastering were, in the interim, adjusted to operate at 24 frames per second HD could be easily integrated with film. There would be some loss of image quality, but this wouldn't be significant enough to negate the cost savings of standards conversion from the present frame rate of 30 frames/second to 24 frames/second. The logic of this is clear.

John Galt made the rather poignant statement that very seldom, if ever, does a feature film get to the release stage without going through at least nine MTF or Modulation Transfer Functions, stages of the post-production process whereby the image is degraded. Each successive stage of post production degrades the image from the originally recorded scene.

If the post production was shifted into the digital domain through a high definition mastering process, the mechanical degradation caused by multiple generations would no longer be an issue. For example, D2 recordings are widely regarded as being able to go through at least nine generations before there is any loss in signal quality.

Pantuso's hypothesis of an interim 24 frames/second rate to easily integrate HD imaging with film is quite sound. He aptly points out that this is merely an interim solution and should not be seen as a cap on the improvement of the technical parameters of the HD imaging system. He also points out the advantages of film for some special effects work, such as high-speed shooting and variable frame rates for special effects.

Pantuso provides us with an overview of how his proposal would function in both NTSC- and PAL-system user countries to, in effect, reduce the financial aliasing.

In theory, his proposal is another in-