

Letter to the Editor

Re: Energy Crisis: Reflection and Perspective

(Papers by Wilton R. Holm, in the *Journal* for February, pp. 81-83, and for March, pp. 220-223.)

Dear Sir:

The papers by Mr. Holm were a welcome and salutary warning that we are facing one of the most critical phases in man's evolution, a phase in which man must now both think and plan many generations ahead. The first pains are being felt already as the "Energy Crisis." Holm's papers are both critically detailed, and cautiously optimistic.

I join in his concern for the future, and in his optimism that, to a *limited extent*, developing technology may of itself be able to contain the environmental impact and the demand for resources by changing the "scale of need." For example, fifty years ago it required about a ton of copper per circuit mile to provide a means of electronic communication. Today, many thousands of circuits can be dealt with in terms of grams copper per mile.

It is, however, abundantly clear that technology cannot expand resources infinitely, and the nitty gritty, the crux of the problem, was only touched on in Holm's last paragraph, and that is population control, and the material expectations of standard of living, rather than quality of life. By quality of life I mean communication and concern between individuals within a protecting and stimulating environment. By standard of living I mean domestic technology, power slaves, high-speed transport, overkill in the comfort of living. The United Nations

estimate of average per capita income for world populations in developing countries is about \$200. We in the developed countries enjoy an average some twenty times that.

If the human race is to survive and is to enjoy a high quality of life, then we must develop global population policies. We must curtail our own materialistic standards of living in the developed countries, and assist development, to a certain level of material standards, in the underdeveloped countries thus producing an overall global increase in the "quality" of life.

Above all we must not consider the energy crisis, the availability of raw materials, the pollution spectre as an American problem, a British problem, a European or an African problem. We must, with Buckminster Fuller, consider all these problems as global — and realize that we now live in a physically inter-related community in a way entirely new to the human race, and that our planet is not a series of independent communities, but a network of *interdependent* communities on board "Spaceship Earth."

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ERIC LUCEY
Research Film Unit
University of Edinburgh
West Mains Road
Edinburgh EH9 3JN, Scotland

Engineering Committees Activities

16mm and 8mm Motion-Picture Committee Report

In the meeting of the committee on 23 April 1974, the status of several current projects was reviewed. The ballots on two documents, which are revisions of RP 1, "Recommendations for 16mm and Regular 8mm Sprocket Design," disclosed some technical errors which are being resolved and this project should be completed shortly.

The work for revising and clarifying PH22.159.1, "Specifications for Super-8 Motion-Picture Film Camera Cartridge and Camera-Cartridge Fit," and PH22.159.4, "Dimensions and Characteristics of the Take-up Core Drive for Super-8 Motion-Picture Film Camera Cartridges," has been essentially completed. It was decided that these two documents should be combined for easier use.

A draft proposal for camera aperture image for "super-16" has been submitted to the committee membership for ballot. The subcommittee under Mr. Detmers reported that "super-16" is used only for enlargement to 35mm and is likely to be used so also in the future. His group is working on a proposed recommended practice concerning enlargement ratio.

The committee viewed a rough-cut work print of a revised

"Jiffy" Test Film (RP 18). It appears that considerable more work is required on this project.

A request for super-8 magnetic sound test films at a running speed of 18 frames per second was discussed, proposed in addition to such films running at 24 frames per second. It was recognized that primary responsibility for such a development lies within the Sound Committee, and it was recommended that the Sound Committee move with great reluctance in considering standards or test films for sound reproducing speeds other than 24 frames per second.

The various proposed standards concerning enclosures and reels for 8mm film for projection were again the subject of considerable discussion. All of these proposals have been circulated again for ballot on a technical basis only. The major question has involved the appropriateness of standardization efforts for items of this sort. After a thorough review of the requirements of the SMPTE and the somewhat different requirements of ANSI, work on all of these items is being held in abeyance pending clarification and resolution of the policy problems.

No additional actions or reports were received concerning

(1) the study of 16mm image steadiness, (2) the use of motion pictures for teaching and training, or (3) the revision of PH22.11, "Dimensions of 16mm Projection Reels."

The committee received reports of the activities of Committee PH7 on Photographic Audio-Visual Standards and of the Ad Hoc Committee concerned with possible revisions of the Universal Leader.

More than 20 standards which are the responsibility of the 16mm and 8mm Committee are up for five-year review. Most

of these need editorial revision, chiefly with regard to nomenclature for 8mm film. After some discussion, it was proposed that an accelerated procedure be used with standards requiring editorial modification, but not technical changes. This should materially reduce the workload for this committee and the numerous other groups involved in approving standards.

GEORGE H. GORDON
Chairman

Standards Committee Report

The Standards Committee met on 22 April 1974.

Because test films and tapes are of such importance to the Society, an Ad Hoc Committee has been formed under the chairmanship of R. Colburn to review this entire program with a view toward upgrading its quality and broadening its scope.

Of major interest to the Standards Committee is the question of Consumer Performance and Safety Standards. It is well known that the public and government agencies favor such standards, and there was much discussion regarding the role the Society should play. It was the consensus of the Standards Committee that the Society should sponsor such standards in our fields of interest, and to this end Herb Farmer will form an Ad Hoc Group to draft a trial Performance and Safety Standard for Motion-Picture Projectors. The draft standard will be reviewed with the Society's legal counsel, and if the counsel approves the draft standard, the Board of Governors will be petitioned to enlarge the scope of the Society's standardizing ac-

tivities to include Consumer Performance and Safety Standards.

The Committee, once again, emphasized the policy of not developing standards on equipment available from only a single source.

The Committee has been concerned, for some time, with the problem of recruiting new members into the standards activity of the Society. In order to keep standardizing activities viable and current, it is important that younger members be enlisted from time to time, yet this does not always happen. It was the consensus of the Committee that there is no single way of solving the problem, and that it is the responsibility of all individuals concerned with standardization to try to convince companies to support the activities and to recruit suitable members.

C. E. ANDERSON
Chairman

standards and recommended practices

Approved American National Standards

On 9 July 1974, the American National Standards Institute approved C98.11-1974, Specifications for an Audio Level and Multifrequency Test Tape for Quadruplex Video Magnetic Tape Recorders Operating at 7.5 in/s.

The standard does not reflect a technical change but has been revised in terms of the shortcircuit flux method. It no longer bases its calibration on a primary reference level recording specified in C98.10.

Inasmuch as compliance with American National Standards is purely voluntary, these standards will become truly effective when broad publicity is given to their existence. ANSI and SMPTE would appreciate any personal influence to promote the use of this standard where such action is appropriate. Copies of these standards may be obtained for a nominal fee from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

Draft American National Standards

Two Draft American National Standards are published here for a trial period and public review: PH22.41, Dimensions of Photographic Sound Records on 16mm Motion-Picture Prints, and PH22.80, Specifications for Scanning-Beam Uniformity Test Film for 16mm Motion-Picture Sound Reproducers.

These revisions do not reflect a technical change from the original versions but have been updated and clarified to facilitate their use.

Comments should be addressed to Alex E. Alden, Staff Engineer, at Society Headquarters prior to 1 December 1974. The proposals have been submitted to American National Standards Committee PH22. All comments received through *Journal* publication will be reviewed before conclusion of Committee action.

Approved International Standards

The International Organization for Standardization (ISO) approved International Standards ISO 543-1974, Motion-Picture Safety Film—Definition, Testing and Marking, and ISO 1188-1974, Recording Characteristic for Magnetic Sound Record on 16mm Motion-Picture Film—Specifications, the technical content of which are published here for information: ISO 543-1974, basically a reaffirmation of the earlier issue which was an ISO Recommendation. It is in complete agreement with American National Standard PH1.25 which is the basis for PH22.31, Specifications for Motion-Picture Safety Film, and ISO 1188-1974, a new standard which reflects the change from a 100 microsecond recording characteristic to the recently adopted 70 microsecond practice. The Society's Sound Committee is preparing a similar standard to cover the 70 microsecond practice, which is a change from the USA practice of a compromise 35 microsecond characteristic in use up to this time. It is anticipated that the change in the USA practice will be effective in mid 1975.

Copies of all International Standards are sold through the American National Standards Institute, 1430 Broadway, New York, NY 10018.

ISO is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. The International Standards published here were developed by Technical Committee 36 on Cinematography. The work of this Committee is administered by the Engineering Department of the SMPTE which functions as the secretariat in ANSI's name. The report of the last meeting of the Committee was published in the February 1974 *Journal of the SMPTE*.—Alex E. Alden, *Staff Engineer*