

Wednesday, June 23, 1954

UNVEIL TODD-AO,

TODD-AO IMPRESSIVE

BIG SCREEN'S NEW CLICK

By Whitney Williams

Hollywood caught its first glimpse of a new filming process yesterday, and even from the rough prints shown it was immediately evident that a sensational new large screen, wide angle system is at hand for the road-showing of top feature pictures.

First announced 15 months ago, but viewed by only a very few top industry figures, Todd-AO, inspired by Michael Todd, and developed by Dr. Brian O'Brien and the American Optical Co., is a 70m process which makes use of a wide angle lens up to 128 degrees, nearing that of the human eye. On the same order as Cinerama, but vastly superior, since it's photographed with only one camera and projected by one machine instead of three, it gives the spectator a terrific sense of audience participation. On the curved screen in Metro's Stage 2, it can be viewed from any angle or seat without distortion.

A single-camera system, it requires the use of only one normal projection booth, unlike Cinerama which requires both three cameras and three booths, latter placed at screen level. Two special projection machines must be installed for showing of films in new process, however, but these can make interchangeable use of both Todd-AO's 70m film, CinemaScope and the standard 35m, switch demanding only a turn of a dial. The projection machines, being manufactured by Philips Co. of Holland, will cost around \$4,000 each.

A new high fidelity sound system with six channels, three tracks on either side of the 65m picture frame, accompanies Todd-AO, plus one control channel. This, according to Dr. O'Brien, who heads the research staff of more than 100 scientists at American Optical, is the most expensive item in a theatre equipping for Todd-AO, but cost "won't be prohibitive," he said.

Todd-AO cameras, which approximate the size of a Mitchell but with a slightly larger head to accommodate the wider 70m film, now have four lenses, to cover anything from a close-up to distant scenic shots. These range from the huge 128-degree wide angle lens (bug-eye), down through 64, 48 and 37-degree lenses. The cameras, made by Todd-AO, the equipment subsidiary of Magna Theatres, will not be sold, only leased.

Process as staged yesterday at Metro, where Stage 2 has been converted into a screening room for Todd-AO, was shown on a screen measuring 51 feet across, 60 feet along the curve which is 13 feet deep at the center, and 25 feet in height, for an aspect ratio of 2-1. This is within inches of the same size screen as Cinerama.

Two series of films in the process were shown, ranging all the way from strict closeups to longshots in which mountains across the desert stood out clearly. All done in Eastman-Color, first segment included footage photographed in Europe by Todd, and the second mostly test scenes for "Oklahoma!" directed by Fred Zinnemann and Agnes DeMille.

Introductory shots photographed newsreel fashion by Todd were a roller coaster, a bullfight in Spain and a water carnival in Venice. Roller coaster scenes carry the same thrill and sensation of audience participation as that in "This Is Cinerama," which it resembles greatly. The same sensation of participation was struck by the bullfight arena and Venice scenes photographed with the bug-eye lens.

Tests made for Rodgers & Hammerstein's "Oklahoma!" which will be the first picture to make use of the Todd-AO, highlighted second segment of demonstration. Rodgers & Hammerstein, incidentally, were present at yesterday's demonstration, with Hammerstein making the initial introduction of the process.

The adaptability of the 48-degree lens for close-ups in dramatic scenes carried particular interest, as did the use of the 128-degree lens for exteriors.

The usual 24 frames per second of standard photography is replaced by 30 frames for more rapid action in the new process. The film's larger size allows greater flexibility and degree of clarity, with O'Brien explaining that the 65m picture frame is three and one-half times the area of the standard 35m frame. The four teeth on ordinary 35m film gives way to five teeth on Todd-AO per frame.

The complaint about the three panels of Cinerama, which can not be exactly synchronized and therefore results in jumping action and distortion, is naturally not present in Todd-AO. The picture is one single unit, and the screen curvature makes possible its being viewed from any part of the house with very little distortion. O'Brien admitted it was possible to show Todd-AO on a flat screen, or lessen the curvature which some at yesterday's showing objected to, but he pointed out that whenever the spectator moved from the center of the house there would be certain distortion. He recommended a screen which would have some curvature, although there is no particular ratio of depth required.

For the sound, five groups of three speakers each are placed in back of the screen, with surrounds in back of the theatre. In yesterday's demonstration, the sound was natural, never overpowering as evident with Cinerama.

Yesterday's demonstration was on an ordinary screen, but Mike Todd reported that a new reflective screen has been developed which will give considerably more light. New projectors turned out by The Philips Co., of Holland, and now being service-tested by AO plants in the East, also will give more light. Projectors currently in use and utilized yesterday are old Ernemann machines converted for the purpose.

Magna Theatres Corp. is the parent releasing company which controls Todd-AO and will release R-H's three pictures, including "Oklahoma!" "South Pacific" and an original. Discussions are now underway for Metro to lease Todd-AO for its production of "Ben Hur."

"Oklahoma!" first will be shown in 50 different situations equipped with Todd-AO equipment, on a roadshow basis. After this, 35m release prints will be turned out for general release. Todd-AO has its own "print-down" process, to reduce the larger size to standard size.