

## Lima Bean Radio

ALTHOUGH he told newsmen he is too busy on about 30 other important projects to commercially exploit his tiny "throw-away" transistor radio development, Hughes Aircraft consulting engineer Glenn A. Schmidt said he has made a three-quarter-inch self-powered delta shaped radio capable of tuning five stations and which fits in the ear. He took apart and "capsulated" three ordinary transistors to make it, he said.

He has planned an even smaller model the size of a "small lima bean" which slips in the ear. It would contain its own battery, be pre-set to a specific station with container color identifying which station, would play continuously for a year and be discarded when worn out. Why not now? No automatic manufacturing process is available, he said, and a worker can't hold his hand steady enough to assemble the parts. Mr. Schmidt used a 100-power microscope on his delta model.

motion pictures in artificially or naturally lighted room, theatres and auditoriums was disclosed Thursday by Dr. George L. Beers, RCA engineering executive who developed the screen.

"This experimental RCA screen," he told the engineers, "makes possible increase of up to 20-to-1 in picture contrast under adverse ambient light conditions and has produced, in tests, startling results in the reproduction of both television and motion pictures."

Although RCA has not as yet established any commercial plans for the experimental screen, Dr. Beers said that numerous tests conducted in various locations under a variety of ambient light conditions indicate the screen's potential for presentation of tv and motion pictures in lighted schoolrooms, homes, showrooms and theatres and for

special applications such as observation of airborne and ground-based radar-scopes.

The RCA development, known as a directional viewing device, is similar in structure to a honeycomb, consisting of a network of tiny, interconnecting cells. The device is fabricated with aluminum foil, .001-inch thin, and cell width, length, and depth can be varied to produce a range of viewing angles.

For the motion picture use, Dr. Beers explained, the directional viewing device can be mounted directly in front of the theatre or home-movie screen, or can be fabricated complete with a backing screen. For television use, with both direct-view and projection-type tv receivers, the device would be positioned directly in front of the receiver.

R. D. Houck and A. E. Jackson, RCA, Camden, outlined slide projector requirements for color tv while A. L. Ford Jr., Unicorn Engineering Corp., Hollywood, described an automatic rewinding and cleaning machine for film and Robert Grunwald and Richard Wallace, Harwald Co., Evanston, Ill., described an automatic film editing machine they have developed for tv stations. Joseph A. Tanney and Alan M. Macauley, SOS Cinema Supply Co., New York, told about their compact hot press title machine for producing three-dimensional and other effects for tv commercials. They also described a new small animation stand for achieving multiple optical effects.

The Ampex video tape recording system held convention attention at the Thursday evening session. Comprehensive description of the machine was presented by Ampex Corp. engineers Charles P. Ginsburg, Charles Anderson and Ray M. Dolby.

Growing field of transistors and their application to all phases of electronics headlined Friday meetings. State of transistors in audio and video equipment in tv was outlined by H. J. Woll, RCA, Camden, while their use in a portable audio mixer was cited by Kurt Singer, RCA Hollywood. William V. Stancil, Stancil-Hoffman Corp., Hollywood, related their advantages in magnetic recording and microphone preamplifiers.

Worth Kramer, WJR, Detroit, chairman; Carleton Brown, WTIV Waterville, Me.; Ralph Evans, WOC Davenport, Iowa; Paul R. Fry KBON Omaha; Cliff Gill, KBIG Hollywood; James L. Howe, WIRA Fort Pierce, Fla.; William B. McGrath, WHDH Boston; Cecil Woodland, WEJL Scranton, Pa.

AM Radio Committee: Grover C. Cobb, KVGB Great Bend, Kan., chairman; George Cory, KUBC Montrose, Colo.; Benedict Gimbel Jr., WIP Philadelphia; Cecil Hoskins, WWNC Asheville, N. C.; Richard H. Mason, WPTF Raleigh, N. C.; John Patt, WJR Detroit; Todd Storz, KOWH Omaha; W. H. Summerville, WWL New Orleans; C. L. Thomas, KXOK St. Louis; Merle H. Tucker, KGAK Gallup, N. M.; Owen F. Uridge, WCKR Miami; Jack Younts, WEEB Southern Pines, N. C. Network representatives: Charles R. Denny, NBC; Don Durgin, ABC;

Arthur Hull Hayes, CBS; John B. Poor, MBS.

Radio Research Committee: E. K. Hartenbower, KCMO Kansas City, chairman; George Clinton, WPAR Parkersburg, W. Va.; Simon Goldman, WJTN Jamestown, N. Y.; R. C. Reynolds, KMPC Los Angeles. Network Representatives. Harper Carraine, CBS; James Cornell, NBC; Don Durgin, ABC; Richard Puff, MBS.

## RAB HEAD DEFENDS ADVERTISER VISITS

Sweeney answers agency criticism citing "growing" number of stations discussing abolition of local agency commission.

A "MILITANT and growing group" of radio stations around the country is "discussing the abolition of agency commission on retail business in their communities" because many agencies either fight radio or use it so badly that stations themselves have to "save" the campaign, RAB President Kevin B. Sweeney declared last week.

He made the assertion in a letter explaining to a San Francisco agency why RAB makes sales presentations direct to advertisers as well as to agencies. James C. Knollin, of Knollin Adv., had complained that in a recent visit to San Francisco RAB executives called upon advertisers direct. In his reply, Mr. Sweeney made clear that his comments did not apply to the Knollin organization, which he said was described by RAB members in San Francisco as being "both fair and competent." But he asserted:

"There is quite a lot of unhappiness in radio with the practices of some agencies. For instance there is a militant and growing group of stations that is discussing the abolition of agency commission on retail business in their communities.

"The basis on which this decision is being weighed is—if I may quote fairly accurately one of the station managers: 'Some of the agencies won't recommend radio. When we take the deal directly to their client, they fight it. When we get a contract they don't know how to use radio properly and louse it up. We have to step in and save it with the new copy, think up the merchandising ideas, write a jingle, etc. And for this we pay them 15%?'"

Mr. Sweeney said that "while none of these criticisms may apply to many agencies, they should be a matter of concern to the entire agency community. Our industry, more than any other, has evidenced that 'friendly cooperation' with agencies that you recommend. We ask no special consideration from agencies as a result. All we want is the right to an open-minded hearing, recommendations that treat us fairly even though radio may not be as 'fashionable' as some other media, and competence at least equal to that shown in print media advertising in the development of radio campaigns."

The RAB president said that "I have never

## NARTB Names Members Of 4 Standing Committees

MEMBERS of four NARTB standing committees for the 1956-57 term were announced last week by President Harold E. Fellows. They follow:

Employer-Employee Relations Committee: Leslie C. Johnson, WHBF Rock Island, Ill., chairman; Joseph J. Bernard, WGR-TV Buffalo; Richard Brown, KPOJ Portland, Ore.; Herbert Evans, Peoples Broadcasting Corp., Columbus; Robert B. Jones Jr., WFBR Baltimore; Ben Ludy, WIBW-TV Topeka, Kan.; Herbert Ohrt, KGLO-TV Mason City, Iowa; Calvin J. Smith, KFAC Los Angeles; Harold C. Stuart, KVOO Tulsa. Network representatives: William Fitts, CBS; B. Lowell Jacobsen, NBC; William Regan, MBS; Mortimer Weinbach, ABC.

Radio Standards of Practice Committee: