"WILLFUL EXPOSURE TO MG - A SUB-COMMITTEE REPORT" - A. S. Rosenwald, Chairman

This subcommittee dealt with the willful infection with M. gallisepticum of replacement commercial layers during the growing period to protect them against conversion and possible damaging effects after they came into lay. This is a consensus report drafted from replies received to inquiries and if those replies were misinterpreted, blame the chairman.

At the Davis Workshop a report given in absentia by Dr. John Allen suggested that pullets can be reared with many fewer complications if they are MG negative. Secondly, if they are later placed on lay ranches and exposed to M. gallisepticum the transition from negative to positive will be subclinical unless complicated by coryza, etc. In cases where exposure to both MG and coryza are likely to occur after delivery to the laying area, Dr. Allen would probably expose them to a mild strain of MG such as the "F" strain during the latter part of the rearing stage to prevent the serious complications of a dual exposure. The results of a trial he conducted several months ago at the experimental house and consisting of two groups of 120 pullets of each of three strains of chickens, one of which was inoculated intraoccularly with "F" strain of M. gallisepticum with an equal number of unexposed controls. These did, of course, pick the infection up from their cagemates. The data indicate lack of the seriousness of the effect of uncomplicated M. gallisepticum infection on egg production. The experience on this large enterprise in the general laying flock indicates the same thing. Dr. Allen summarized, "Intentional exposure could probably, under these conditions, be used successfully, but to date natural exposure and conversion has not caused a problem so I haven't felt an intentional exposure was necessary."

The subcommittee dealt only with M. gallisepticum infection and only in commercial laying stock and emphasized that the goal for all classes of poultry must be complete eradication of M. gallisepticum infection. Willful infection ("controlled exposure") should not be used with potential replacement breeders. Since the benefits of complete freedom from M. gallisepticum infection has been well documented, the maintenance of freedom from infection demands careful surveillance and high security. Uncomplicated M. gallisepticum infection can occur either prior to production or even during production with no proven detrimental effect. However, M. gallisepticum infection when complicated by other infections on multiple age commercial egg farms or complicated by unusual stresses can cause serious economic damage. For these reasons, though we decry the use of willful exposure, it is being done and will continue to be done. It was the consensus--and this is not an official position--that this practice be recognized as one which is being used; further investigations are required to develop the most effective reagents and programs; to avoid the introduction of other serious problems these must be used under careful supervision, probably under a permit system based on need. All cultures need to be extremely carefully monitored to ensure that they are viable and effective in inducing immunity without introducing other infections or having serious damaging effect on the growing commercial non-breeder replacements exposed. A record must be kept of all material used and subsequent results; information should be accumulated to determine the most effective way to use willful infection and likewise the most effective way to stop using it with the goal that all ranches and flocks of chickens and turkeys should be free of Mycoplasma gallisepticum.