

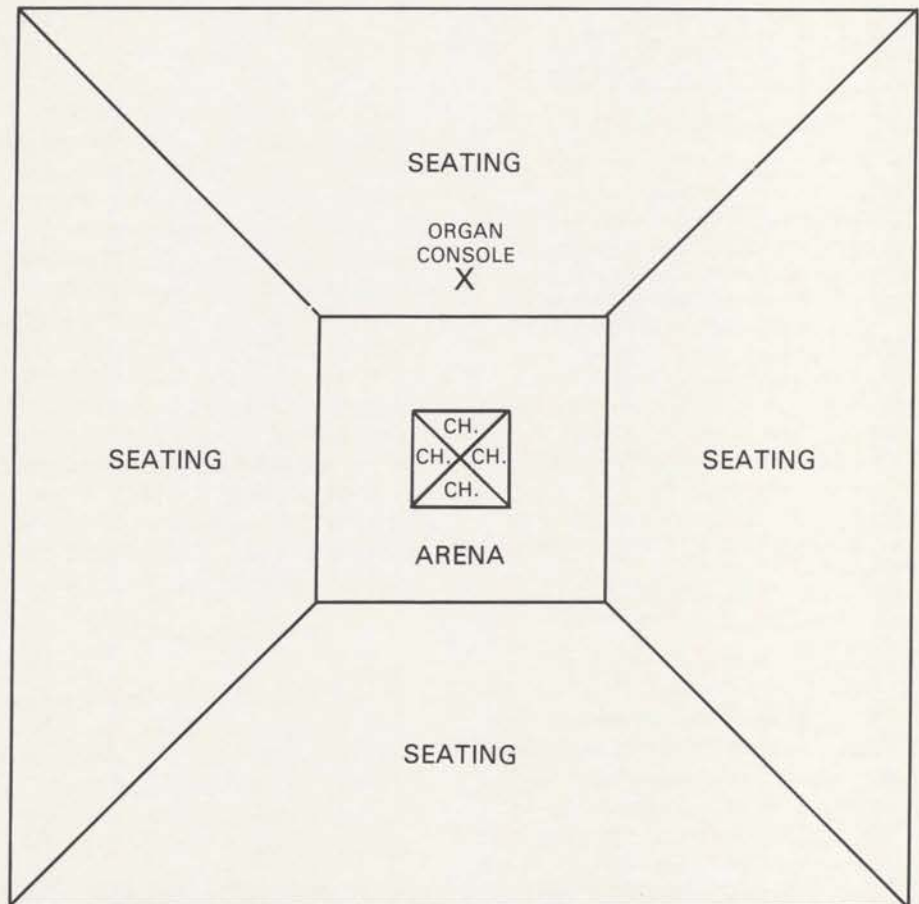
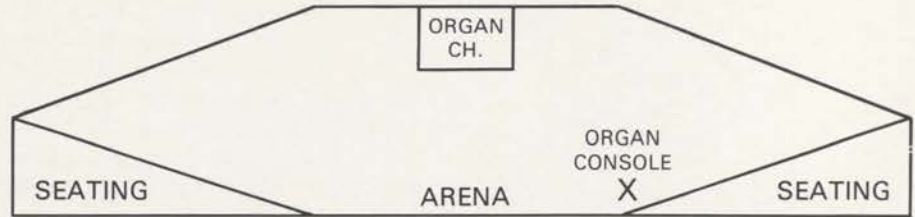
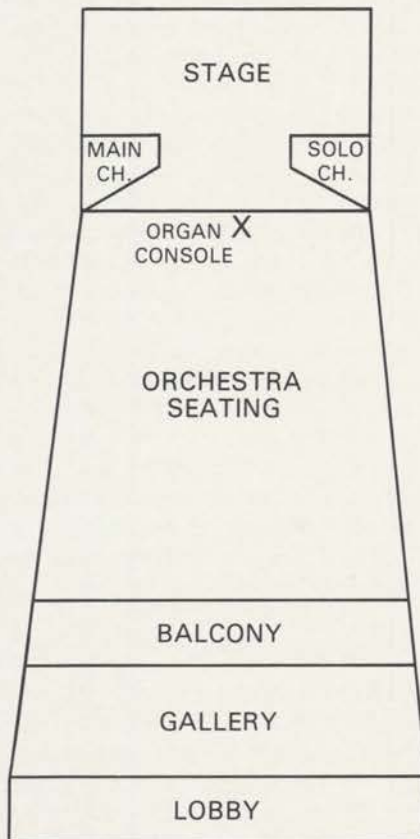
# THE ACOUSTICAL CONSULTANT

(Below) Typical installation in stadium coliseum, convention center, etc., designed for good acoustics.

## Effects of Chamber Placement and Design in Large Installations

by R.J. Weisenberger

(Below) Large theatre installation designed for good acoustics.



One secret to good acoustics in large installations is to keep the ratio of direct to reflected sound energy nearly constant to all parts of the auditorium.

This can be accomplished by placing the chambers high above the stage area, and by "toeing them in"

toward the rear of the auditorium. This will prevent "blasting" the first few rows of seating while providing good coverage to the most distant seats.

The use of triangular chambers will also have the added benefit of enhancing the deepest bass tones, while eliminating standing waves.

To keep sound delay to a minimum for the organist, the console should always be located within 100 feet of the pipes.

Chambers should never be located behind a curtain or any acoustically absorbant material. If a curtain must be used, it should be acoustically transparent. □

