2. CLASSIFICATION PURPOSE

According to Harvey (1969), the many purposes of classification can be grouped into two types; general or 'natural' classification, and specific or 'artificial' classifications. Two classification systems are currently being presented for the GBR, namely the "Reef cover and zonation classification system for use with remotely sensed Great Barrier Reef data" presented here, and the 'Simple entropy classification of surficial cover types on reefs' developed by Radke (1983).

The classification systems are both of the 'artificial' type and have been devised for specific purposes. The two systems differ however, because of the specific and different needs of users, and in the criteria by which reef features are classified into comparable assemblages.

Radke's classification system was developed for geologists requiring a classification based on the distribution and nature of sedimentological facies within the reef complex. Radke (1983) states that 'the classification has a substrate and sedimentological bias but is intended to complement other classifications by superimposition'.

In comparison, the classification system presented here is developed primarily for GBR remote sensing where a classification based on surface reef covers and zonation (as observed both on the ground and through varying marine and atmospheric conditions on aerial and orbital imagery) is required.

Adoption of these classification systems will allow a more clear and efficient communications between GBR scientists. Stoddart (1969a, in Longman, 1981) points out that "what is needed is standardised procedures to ensure comparability of reef studies and the identification of variations in reefs both on local and regional scales..." and Longman (1981) adds; "...through time."

The first step to providing the standardisation is to recognize the user's needs (needs of geologists differ from those of biologists), and then to classify reefs into comparable assemblages according to the parameters which are important. Harvey (1969) states that purpose and classificatory form are inextricably bound up together and the utility of a given system of classification cannot be assessed independently of its purpose.

The classification system presented here (Appendix II) was devised for two principal purposes:

- Firstly to provide an objective and consistent framework for geomorphological information on surface reef covers and zonation which could be derived from remote sensors and field data. This information could then be applied to coral reef resources planning and management throughout the Great Barrier Reef province.

- Secondly to provide a means for comparing and evaluating the various interpretations of aerial, orbital and ground data on the Great Barrier Reef.