

Note for

## **Butterflies Flutter By**

by

**David Worrall**

Duration : 9 minutes

Most of the material for **Butterflies Flutter By** was composed in May 1986 as part of a larger work, **A Sensitive Chaos**, for movement artists and dynamic visual projections. This present realisation, created in June 1987, makes extensive use of space as an integral component of the composition.

The primary driving force of the work is rhythmic and spatial. The work consists of three texture layers each of which is made by the concatenation of many small phrases of different time lengths. The lilting "triplet" rhythm is in fact made by juxtaposing durations in fibonacci ratios ( 5:8, 8:5 etc) . Each small phrase is repeated many times. Because the number of repetitions is constantly varying (most often prime multiples), it is not immediately obvious when the changes in phrase will occur. In the original 4 channel version, these layers are being constantly panned around the listening plane, in spatial counterpoint. This stereo version retains some of the feeling of this counterpoint. The coda breaks the flow of this counterpoint and provides an unexpected twist.

The work was composed using a Fairlight CMI - 2X, an 8 bit sampling computer, using its MCL control language. The sounds of the work were made by sampling woodwind instruments (mainly flutes) and processing these using looping and filtering techniques.