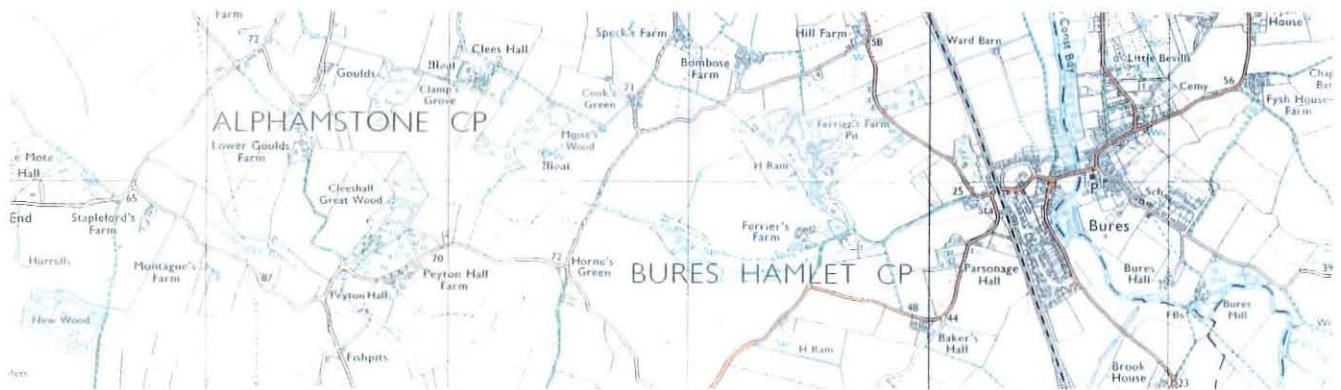


LAMPS CARTOGRAPHIC

Map production systems must do more than simply capture and edit geographical data. For maximum productivity they must also be able to create digital maps of cartographic quality and perform tasks required for the production of a multiple map sheet series. Functions needed for cartographic map production include the input and manipulation of text in various forms, consistency checks of data along sheet edges and the selection and manipulation of data based on polygonal areas.

The *LAMPS* map production system provides easy-to-use options for all these operations.



Product description

The *LAMPS* map production system allows text in various fonts to be input and manipulated, so that they can be used wherever text is required on a map, from the simple annotation of point features, through alignment along linear features to the labelling of extensive areal features.

A powerful edgematching facility is available which allows data along an arbitrary straight line (not necessarily a sheet edge) to be tied together. Only features of the same type whose ends lie within the user specified tolerance will be joined together (fences will not be connected to roads!) and any movement of the ends is smoothed back along both features to a selected distance. Where there is any ambiguity, the operator is guided to the area in question to carry out the edit manually.

Polygon boundaries based either on existing features or input as a series of coordinates, form the basis of clipping and selection commands.

The Benefits

- Complete production of map sheets, including all marginal text, is possible
- The map designed on the workstation is the same as the map plotted
- Quality of data is assured, for example through consistency checks along sheet edges

LAMPS Cartographic features

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Input

Text can be input from the keyboard or entered from a previously prepared ASCII file.

Text sizes

Text heights are user-selectable, either by point size or as sheet mm.

Text positioning

Text can be positioned at arbitrary angles, with the locating point selected from nine positions relative to the text's bounding box.

Editing

Text is aligned along linear features automatically on command, but individual characters, words, lines or paragraphs can be edited later (eg. to change font, text height, colour or spelling).

Labelling

Aligned text may be stretched to label the whole length of a feature or an individual area.

Word Processing

Lines of text can be combined to form paragraphs and various word processing functions can be applied, including optional justification to a specified width.

Edgematching

This facility is based on any straight line and three modes of operation are available:

- Features can have their ends extended to a line;
- The ends of two features can be moved to a common position on a line (leaving two features);
- Two features can be joined together at a common point to form one continuous feature.

Polygons

Linear features can be clipped to polygonal boundaries, leaving the part(s) inside, outside or both. Polygons can be used for areal selection and features lying inside, outside or across the boundary can be edited (eg deleted, transformed or feature code changed).

Requirements

The *LAMPS Cartographic* options are *Region data editing*, *Map sheet edgematching* and *Text manipulation*. These are included in *LAMPS Agency* and are options available with *LAMPS Mapper* and *Foundation*, version 3.4 and higher.

Laser-Scan *LAMPS* map production and *VTRAK* data capture systems are designed for the full range of map production tasks – data capture and input, map manipulation, cartographic enhancement and high quality output.