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SUBJECT: SNOBOL4

My current plans for SNOBOL4 are as follows:

1. Split the source (currently 80 records) into several smaller procedures.
2. Run each of the procedures through a "symbol_table_extractor" which will produce a cross reference of where each symbol is defined.
3. Run each of the procedures through a "macro_expander". Inter-procedure references will be resolved into standard Multics links using the symbol_table produced in (2) above.
4. Assemble the ALM source code produced by the "macro_expander".
5. Bind the procedures so that all links will be snapped. Due to address schemes used, the procedures will not be able to run unbound.
6. Run the special initialization procedure which will produce a skeleton data segment.
7. Install the system.

As can be seen, this is a fairly mechanical procedures, and will be able to accommodate updates from BTL with little or no difficulty.

The two programs I have mentioned above (symbol_table_extractor and macro_expander) were originally planned to be in PL/I, but after trying to

write macro_expander in PL/I I decided it would be much more easily done in TRAC, which has powerful macro facilities built in. I plan either to use may own implementation of TRAC or the Dartmouth version which should be available in a few weeks.

One problem I have run into is that I will need quite a bit of on-line storage.

a) MACRO SOURCE: 120 records

b) ALM SOURCE: 300 records

c) OBJECT: 60 records

d) BOUND OBJECT: 30 records

which totals up to about 500 records.