# LOOPS Release - [4-July-84]

Some changes which are hereby incorporated into the new LOOPS release:

1) There is now a PrettyPrint Macro for instances (see the Lisp manual). This macro sends the PP message to an instance when the instance is encounted in PrettyPrinting another structure to a display device.

To suppress this PrettyPrinting one can bind the variable ObjectDontPPFlag to T.

To force pretty printing even on a file, one can bind ObjectAlwaysPPFlag to T.

ObjectAlwaysPPFlag dominates ObjectDontPPFlag. In the standard PrettyPrinting of instances with Object.PP, ObjectDontPPFlag is bound to T, so there is no recursive PrettyPrinting. (Thank you Henry Thompson -- Henry used this feature quite effectively in his grammar system, and helped to incorporate it in Loops)

2) Loops is now loaded using SYSLOAD, which means that Loops does not know about the files for functions. If you must examine and/or debug basic Loops Functions, call

## (DebugLoops)

which does a LOADFROM each of the Loops files (it takes about 3 minutes).

3) If one wants to have a temporary instance variable whose value is not dumped on the file, use the active Value PutFn "Temporary", in an active value of the form:

## #( val NIL Temporary)

On the file it will print out as

## #(NIL NIL Temporary)

4) To have data types as values of instance variables, use the active Value PutFn "DataType" in and active value of the form:

## #(val DataType NIL)

On the display val will print as a datatype pointer, and on the file it will be printed out using HPRINT.

5) Features removed. EDITIVs and EDITCVs options in the browser have been removed since they are not necessary with the display browser, and no longer worked correctly. Editing classes with the TELETYPE mode editor no longer works, and is hereby decomissioned.

Enjoy, Danny Bobrow