ee9 V8 ERRATA

 $\bullet \ The \ POC \ order \ for \ the \ FW \ would \ output \ ```, `when \ in \ `transcribing' \ (i.e.\ 8-bit\ transparent) \ mode.$

SIGNIFICANCE: MINOR.

• The disassembly of an operand as a symbol would fail when its value was outside the valid range of addresses.

SIGNIFICANCE: MAJOR IF THE RUN USES DISASSEMBLY, BUT EASILY AVOIDED.

V8.1A CORRECTS THESE ERRORS IN V8.0K.

• The disassembled operand of SET was shown in octal if decimal output was chosen and its value was 8 or 9. SIGNIFICANCE: TRIVIAL.

• An unlikely case in single-precision floating-point division caused an overflow (Constraint_Error) failure.

SIGNIFICANCE: MAJOR IF THAT CASE AROSE, BUT IT WAS VERY UNUSUAL.

• The Unix commands tr and sed on ARM Macs fail on Latin-1 characters outside the ASCII subset. Their usage in extract_symbols, sttl, peep and neat has been replaced by new Ada programs.

SIGNIFICANCE: MAJOR, BUT ONLY ON ARM-BASED COMPUTERS.

V8.1s corrects these errors in V8.1a.

• The TSD OUT 47 may cause a NEST underflow.

SIGNIFICANCE: MINOR, OUT 47 IS NOT USED BY ANY ORIGINAL OR RESTORED SOFTWARE.

V8.1u corrects this error in V8.1s.

• glance fails on Usercode of the form: *J....

SIGNIFICANCE: MINOR, NONE OF THE CODE IT WAS CREATED TO PROCESS HAS THAT FORM.

V8.1v corrects this error in V8.1u.

• glance fails (again!) on Usercode of the form: *J....

SIGNIFICANCE: MINOR, NONE OF THE CODE IT WAS CREATED TO PROCESS HAS THAT FORM.

· bangs and kwote call ports wrongly.

SIGNIFICANCE: MINOR, EASILY AVOIDED.

V8.1x corrects these errors in V8.1w.

THE FOLLOWING ARE PROBLEMS WITH THE KIDSGROVE ALGOL SYSTEM, NOT WITH ee9's EMULATION OF THE KDF9 ARCHITECTURE. THEY OCCUR ONLY IN OPTIMISED OBJECT PROGRAMS.

• The Kidsgrove system gives wrong results for some programs that contain calls on library routines.

SIGNIFICANCE: MAJOR, PREVENTS CORRECT EXECUTION OF THOSE OBJECT PROGRAMS, WHICH RUN PROPERLY WHEN NOT OPTIMISED.

IS HOPED THAT A FUTURE RELEASE WILL INCLUDE A NEW VERSION OF THE KIDSGROVE ALGOL SYSTEM THAT MITIGATES THE ABOVE PROBLEM.

- The Kidsgrove system gives incorrect results for some programs containing optimised 'step-until' loops with an iteration count that exceeds 65535. A loop traversing an array would not normally have a problematic iteration count, as the largest physically possible array contains fewer than 32768 elements.
- Optimised 'for' loops evaluate the 'step' and 'until' expressions only once. This makes a difference if the body of the loop exerts a side effect on either of them: the side effect will be inoperative.
- If the body of a optimised 'step-until' loop explicitly changes the controlled variable, the change will not have its intended effect on the course of the iteration.

THESE ARE PERMANENT LIMITATIONS OF OPTIMISED LOOPS, DUE TO THEIR ITERATION COUNTS BEING HELD IN THE C FIELDS OF Q STORES.