

# A Concurrent Pascal Compiler for Minicomputers

## Table of Contents

|                                   |    |
|-----------------------------------|----|
| 1. Introduction . . . . .         | 1  |
| 2. Definitions . . . . .          | 2  |
| 3. Pass Structure . . . . .       | 3  |
| 4. Lexical Analysis . . . . .     | 5  |
| 5. Syntax Analysis . . . . .      | 11 |
| 6. Name Analysis . . . . .        | 21 |
| 7. Declaration Analysis . . . . . | 33 |
| 8. Body Analysis . . . . .        | 41 |
| 9. Code Selection . . . . .       | 47 |
| 10. Code Assembly . . . . .       | 51 |
| 11. Interpass Topics . . . . .    | 52 |
| 12. The Virtual Machine . . . . . | 55 |
| 13. Implementation . . . . .      | 58 |
| 14. References . . . . .          | 70 |
| Appendix: Syntax Graphs . . . . . | 71 |