## MATERIALS RECEIVED Tony Marsland University of Alberta Edmonton, Alberta, Canada

## 1. BASIC LITERATURE OF COMPUTER CHESS Hartmut Tanke, 69 pages.

After many years of diligent work Hartmut Tanke's Computer Chess bibliography has been re-issued. This August 1985 report contains about 1400 entries, broken into five categories as follows:

- a) Basic computer-chess literature in English and German (742 entries)
- b) Articles on Computer Chess and Cognitive Psychology (71 entries)
- c) Russian language articles (76 entries)
- d) Literature on Chess-playing in Artificial Intelligence (95 entries)
- e) Other popular literature in German and English (409 entries)

The report is worth at least \$ 5.-- or DM 10 to anyone who is seriously interested in having a fairly complete list of computer-chess literature, and may be available from: Mr. H. Tanke, Triftstrasse 6, D-1000 Berlin 65, Germany.

## 2. COMPUTERSCHACH UND PROBLEMHANDHABUNGSPROZESSE (Computer Chess and Problem Handling Processes) H. Tanke, April 1984, 197 pages.

A thesis for the "Diplom" (roughly M.Sc.). Work done under Project Caesar, Institut fur angewandte Informatik, The Technical University of Berlin, Franklinstrasse 28/29, D-1000 Berlin 10, Germany.

The thesis is in German, but contains the following English abstract:

## ABSTRACT

"This paper aims at a new orientation for computer chess in the area of problem handling processes. Based on the extended and defined theory of C.E. Shannon the status of computer chess is critically reviewed. Aspects of representation and use of knowledge for problem solving are discussed. A progress developing of problem conception are the cognitive processes of chess thinking as described in the cybernetic model of information circulation. The key phenomenon of progressive deepening characterizes the fact that real problems are rather handled than solved. Making critical use of cybernetic and cognitive findings and applying those to the works of Shannon and A.D. de Groot the fundamental concept of information spiral is introduced. A concept analysis shows that within that spiral information and behavior is of mutual influence. The results are used for an assessment of new approaches to computer chess."