CORRESPONDENCE

The *ICCA Journal* welcomes all correspondence. The Editors, however, obviously cannot guarantee publication and contributors are formally notified that their correspondence, if it reaches print at all, may do so in modified, condensed or abstracted form at the Editors' discretion. Correspondents, by submitting their welcome contributions, implicitly accept the Editors' ruling about publication as binding upon them.

HEISMAN'S RESIDENCE

The Editors regret that the address of Dan Heisman (cf. *ICCA Journal*, Vol. 12, No. 2, p. 124) not only has been garbled, but was badly out of date. For the record we print Mr. Heisman's correct address below.

Dan Heisman
1263 PASO FIND Drive
Warrington, PA 18976
USA

FIDE AND COMPUTER CHESS

Casto P. Abundo

General Secretary of FIDE
P.O. Box 2841
6002 Lucerne / Switzerland

The Editors have received the following communication, which we reproduce in its entirety.

"As we advised International Computer Chess Association president David Levy, we are pleased to inform you that the FIDE General Assembly in Mayaguez, Puerto Rico approved the following resolution:

FIDE fully supports the research efforts to improve the playing strength of computer-chess programs which are being undertaken in various parts of the world."

DEEP THOUGHT: IN AMPLIFICATION

Feng-hsiung Hsu
for the Deep Thought team

Carnegie-Mellon University
Dept. of Computer Science
Schenley Park, Pittsburgh, Pennsylvania
15213 USA

The Editors have received some comments from the Deep Thought team on Professor Michie's contribution *Brute Force in Chess and Science*. We reproduce them in their entirety.

"In reference to the article *Brute Force in Chess and Science* by Prof. Donald Michie (*ICCA Journal*, Vol. 12, No. 3, pp. 127-143), we wish to correct some serious misstatements about Deep Thought.

1. "The evaluation function [of Deep Thought] is less knowledge-rich than that of Berliner's Hitech, ..." [p. 134]. Sweeping statements of this nature require serious substantiation, and, as far as we know, there is no evidence that Hitech has a better evaluation function than Deep Thought. However, we will readily admit that some commercial micros probably have better evaluation functions than research chess machines.

2. "... from which [Berliner's Hitech] some of its [Deep Thought's] constituent evaluators were adapted, notably concerning pawn structure." [p. 134]. I have no idea where this outrageous statement could have come

from. It has been stated repeatedly, including to Prof. Michie in person, that Deep Thought contains no element from Hitech, period. The evaluation function of Deep Thought was in part based on the written descriptions of both the Northwestern Chess 4.X program and the Belle chess machine. There was no written description available about Hitech's evaluation function for us to draw on. In fact, we deliberately avoid any entanglement with Hitech in order to preserve our independence.

3. "... its partial debt to Hitech..." [p. 134], ditto. There was simply no way for Deep Thought to be indebted to Hitech; we made certain of that."

[For our readers, we quote the entire sentences of which parts are cited above. " The evaluation function is less knowledge-rich than that of Berliner's Hitech, from which some of its constituent evaluators were adapted, notably concerning pawn structure. But it contains more knowledge, if only by reason of its partial debt to Hitech, than the evaluation functions of Deep Thought's other predecesors."]

DEEP THOUGHT'S CHARACTERISTICS CLARIFIED

Prof. dr. D. Michie

The Turing Institute, George House
36 North Hanover Street
Glasgow G1 2AD
Scotland / United Kingdom

The Editors have received a rejoinder by Prof. Michie to Dr. Hsu's comment. It is published in its entirety, albeit without the saluting formulae.

"In reply to the three points made in Dr. Feng Hsu's letter:

1. My characterisation of Deep Thought's evaluation function as less knowledge-rich than that of Hans Berliner's Hitech was based on my own assessment of the respective descriptions given me by Drs. Feng Hsu and Berliner. Note that I credited Hitech's evaluation function with being more "knowledge-rich", not "better".

2. I based my statement about DT's treatment of pawn structure on discussions with Dr. Berliner and, as I thought, Dr. Murray Campbell of the DT team. In a recent telephone conversation Dr. Murray corrected my mistake. I asked him why, since Berliner's deeply researched pawn-structure ideas were at the time well known to him, his team did not make use of them. He explained that implementational considerations made this impractical. I am glad to place this clarification in the public domain.

3. In the light of Dr. Feng Hsu's letter and of Dr. Campbell's statement I withdraw my attribution of a partial debt owed to Hitech. I also take this opportunity to express my long-held opinion that the scientific contribution to computer chess as a whole made by Hitech's author Dr. Hans Berliner has been and continues to be massive."

LITTLE TO FEAR FROM CHESS COMPUTERS

P.G. Bakker

Kagerdreef 172
2172 HR Sassenheim
The Netherlands

The editors are glad to have received a letter from Mr. Bakker as a comment to Prof. Hans Berliner's report on the "Humans versus Computers Match 1989" (cf. *ICCA Journal*, Vol. 12, No. 3, pp. 182-183). With Mr. Bakker's permission, we reproduce his letter, as directed to Hans Berliner, below.

"I was very pleased to read that it is finally your intention to focus on the realities of the situation concerning computers playing chess versus humans. Your conclusions however do amaze me. You state that the top six