Selective Search



August / September 1994

T H E

C 0 M

P U

T E R

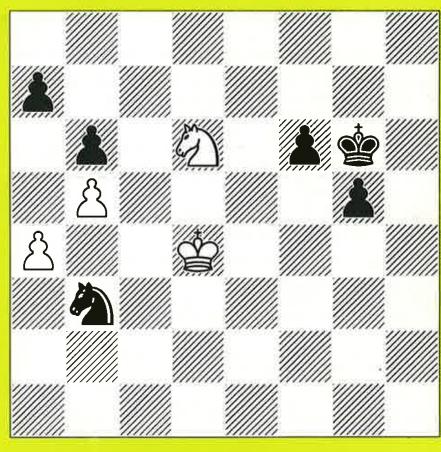
C H

E S

M A G

A Z

I N E



KASPAROV (Baku) 0

V

LANG (Bournemouth) 1

Selective Search

is a review of the UK chess computer scene published six times a year by Countrywide Computers Ltd.

who stock all the leading makes and have the widest range of new and secondhand machines in the UK. Countrywide are also sole distributors for Mephisto in Great Britain and the Republic of Ireland.

Orders and enquiries are welcome either by phone or in writing:

Countrywide Computers Ltd.

Tel: (0353) 740323

Victoria House, 1 High Street, Wilburton, Cambs. CB6 3RB

Visitors welcome. Hours are 9am - 5.30pm Mondays to Saturdays, although it is advisable to telephone first. Mail order a speciality - Access and Visa accepted.

Subscribe to Selective Search!

Only £12 for a whole year's subscription (overseas £18)



The World's Best Chess Computers...

Selective Search is compiled and produced at the offices of *The British Chess Magazine* on behalf of Countrywide Computers Ltd. Articles submitted for publication should be addressed to: Simon Knight, Editor, Selective Search, c/o The Chess Shop, 69 Masbro Road, Kensington, London W14 OLS. Tel: 071 603 2877. Fax: 071 371 1477.

Contents

Games Collection: Frank Holt with Genius 2.0, R30 and Berlin Pro						
• Genius v Kasparov: Cover story. Lang's program passes the ultimate test	12					
• Countrywide at the British: Mike Healey makes his stand	14					
• New Product Review: The Diamond and Sapphire from Novag	16					
• Rating Guide and news from Ply: Back again at last!	23					

GAMES COLLECTION

Last issue we gave the table of Frank Holt's giant match between the R30 and the Mephisto Genius 2 running on his 486/66. Here is a selection of the best, plus some his new series - between the R30 and the Berlin Professional.

OGA

☐ Tasc R30 (Normal)

■ Mephisto Genius 2

All moves in 90m, each

1 d4 d5 2 c4 dxc4 3 \$\angle\$16 4 e3 e6 5 \$\alpha\$xc4 c5 6 0-0 a6 7 b3 cxd4 8 \widetilde{\pi}xd4

MG2 left book with its seventh (-0.12); R30 one move later (+0.20).

9 2 xd4 e5

MG2 spent 10½ minutes on this.

10 ②f3 b5 11 ②e2 e4 12 ②d4 ②c5 13

\$\text{\mathbb{L}} 2 0-0 14 \$\text{\mathbb{L}} c1 \$\text{\mathbb{L}} d6 15 a4 bxa4 16 \$\text{\mathbb{L}} xa4 \$\text{\mathbb{L}} e5 17 f4 exf3 e.p. 18 \$\text{\mathbb{L}} xf3\$

The first signs of an advantage; (+1.14 R30, -0.48 MG2).

18... **Z**a7 19 **Z**a5 **②**fd7



20 \(\mathbb{L}\)c2! \(\mathbb{L}\)b7

So the 'passive' 20 \(\mathbb{Z}\)c2 is looking like a real cracker.

21 ②b5 &xf3 22 ②xa7 &e4 23 IC4 &xh2+24 &xh2 &xb1 25 ②c8 f6 26 IC7 &e4 27 ②d6 &c6 28 e4 Can the R30 retrieve its knight? At the moment it's getting squeezed.

Someone said once that when the R30 gets its nose in front, it won't let go... 34... \(\tilde{\tilde{A}} \) \(\tilde{\tilde{

Please move up the pawn - g4!
38... 堂e8 39 單c7 堂d8 40 單b7 堂c8 41 單gc7+ 堂d8 42 單h7 堂c8 43 g4 罩d2+ 1-0 (66).

Slav

☐ Tasc R30

■ Mephisto Genius 2

All moves in 60m. each

1 d4 d5 2 c4 c6 3 ②f3 ②f6 4 ②c3 dxc4 5 a4 ②f5 6 e3 e6 7 ②xc4 ②b4 8 0-0 ②bd7 9 ₩e2 ②g6 10 e4 ②xc3 11 bxc3 ②xe4 12 ②a3 ₩c7 13 ₩b2 ②h5 14 ②e5 ②xe5 15 dxe5 0-0-0

R30 out of book with its fifteenth, MG2 one move later.

16 單fe1 罩d2 17 對b4 公xf2 18 桌c1 公d3 R30 -0.90, MG2 +1.21.

19 \(\text{ xd3 \(\text{ xd3 20 \(\text{ Bb1 \(\text{ g6 21 \(\text{ c5 22} \) \) \(\text{ bd8 23 \(\text{ g5 \(\text{ Z8d5} \) \)}

R30 -1.51, MG2 +1.78

24 \$\bullet\$ c4 25 \$\times\$ f4 \$\bullet\$ c5+ 26 \$\times\$ h1 b6 27 \$\bullet\$ a1 \$\bullet\$ a5 28 \$\bullet\$ a2 \$\times\$ b8 29 \$\bullet\$ ac1 \$\bullet\$ c5 30 \$\bullet\$ b5 31 \$\bullet\$ a2 \$\bullet\$ c6 32 \$\bullet\$ a3 h4 33 \$\times\$ g1 h3 34 gxh3 \$\bullet\$ xh3 35 \$\bullet\$ ed1 \$\bullet\$ c5 36 \$\bullet\$ d8+ \$\times\$ c7 37 \$\bullet\$ d4 \$\bullet\$ f3 38 \$\bullet\$ e1 \$\bullet\$ h4 39 \$\bullet\$ c1 \$\bullet\$ g3 \$\bullet\$ xg3+ 41 hxg3 \$\bullet\$ xg3+ 42

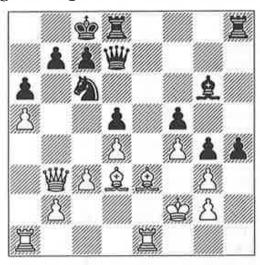
會f1 皇d3+ 43 罩xd3 營xd3+ 44 會g2 營g6+ 45 會h2 營h5+ 46 會g3 罩xe5 47 營f4 營g5+ 48 營xg5 罩xg5+ 49 會h4 罩a5 0-1.

Petroff

- ☐ Tasc R30 (Offensive)
- Mephisto Genius 2

All moves in 90m. each

1 e4 e5 2 包f3 包f6 3 包xe5 d6 4 包f3 包xe4 5 d4 d5 6 单d3 包c6 7 0-0 单e7 8 置e1 单g4 9 c3 f5 10 營b3 營d7 11 包fd2 0-0-0 12 f3 包xd2 13 包xd2 单h5 14 包f1 g5 15 f4 h6 16 单d2 单g6 17 包g3 g4 18 a4 单h4 19 a5 单xg3 20 hxg3 a6 21 全f2 h5 22 单e3 h4

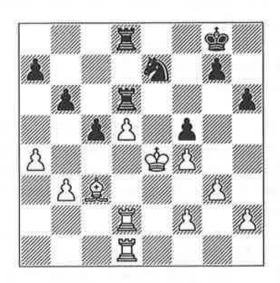


English

- ☐ Mephisto Genius 2
- Tasc R30 (Offensive)

All moves in 30m, each

 25 exf3 ②c6 26 ②c3 罩e6 27 \$\dig g2 ②e7 28 f4 f6 29 \$\dig f3 d5 30 cxd5 \dig ed6 31 \$\dig e4 f5+



32 \$\d3! \(\mathbb{Z}\xd5 + 33 \\ \mathbb{Z}\c4 \(\mathbb{Z}\xd2 \) 35 \(\mathbb{Z}\xd2 \\ \mathbb{Z}\tag 6 \) 36 \(\mathbb{Z}\tag 5 \) \(\mathbb{Z}\tag 6 \) 37 \(\mathbb{Z}\tag 6 \) 38 \(\mathbb{Z}\tag 6 \) 39 \(\mathbb{Z}\tag 6 \) 40 \(\mathbb{Z}\tag 7 \) 40 \(\mathbb{Z}\tag 8 \) 41 \(\mathbb{Z}\tag 6 \) 39 \(\mathbb{Z}\tag 6 \) 42 \(\mathbb{Z}\tag 6 \) 43 \(\mathbb{Z}\tag 7 \) 55 44 \(\mathbb{Z}\tag 6 \) 45 \(\mathbb{Z}\tag 6 \) 46 \(\mathbb{Z}\tag 7 \) 57 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 47 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 49 \(\mathbb{Z}\tag 6 \) 48 \(\mathbb{Z}\tag 6 \) 49 \(

King's Indian

- ☐ Tasc R30 (Defensive)
- Mephisto Genius 2

All moves in 30m, each

1 d4 4 f6 2 c4 g6 3 4 c3 1 g7 4 e4 d6 5 \(\text{\mathbb{e}}\)e2 0-0 6 \(\text{\mathbb{e}}\)g5 c5 7 dxc5 \(\text{\mathbb{w}}\)a5 8 \(\text{\mathbb{e}}\)d2 豐xc5 9 公f3 公c6 10 0-0 公g4 11 數b3 皇d4 12 皇e1 ②ge5 13 ②d5 ②xf3+ 14 魚xf3 e6 15 幻c7 罩b8 16 罩d1 a6 17 **剉d3** 鱼xb2 18 鱼d2 匂e5 19 剉b3 b5 20 剉xb2 **豐f6 豐d8 24 豐d4 e5 25 豐xc4 全g4 26 f3 쌀b6+27 罩f2 点e6 28 쌀e2 쌀c6 29 罩c1 瞥b7 30 兔g5 罩fc8 31 罩d1 罩c6 32 兔f6 h6 幽a7! 36 幽c2 g5 37 f4 幽e3 38 h3 gxf4 39 Qd8 罩b4 43 Qe7 ₩g6 44 ₩d3 Qe6 45 瞥d1 罩xe4 46 瞥d2 桌c4 47 瞥d1 d5 48** 요c5 含g7 49 罩b2 d4 50 요b4 罩e3 51 a4 f3 52 坐c2 罩d3 53 鱼e1 鱼b3 54 ¥f2 f6 55 빨g3 빨xg3 56 兔xg3 fxg2 57 쓸xg2 兔d5+58 �h3 ≌a3 0-1.

King's Indian

☐ Tasc R30 (Offensive)

■ Mephisto Genius 2

All in 60m. each

Has strong possibilities - ②g3 then ②f5. MG2's hint was 16 ₩a4.

 c6 17 dxc6 Ic8 18 0-0-0 Ixc6 19 公g3

 Ic8 20 公f5 Ic6 21 公d5 Ia6 22 Wd2 a4

 23 \$\delta\$b1 a3 24 b3 \$\delta\$b8 25 Ih3 公f6 26

 公c3 \$\delta\$f8 27 \$\delta\$c2 \Omega e8 28 Ihh1 公g7 29

 公c3 \$\delta\$f8 27 \$\delta\$c2 \Omega e8 28 Ihh1 公g7 29

 公c3 \$\delta\$f8 27 \$\delta\$c2 \Omega e8 31 \Omega cd5 Ib8 32

 公f6+ \$\delta\$h8 33 \$\delta\$b1 \Omega e6 34 \Omega f5 \Omega d4 35

 \$\delta\$a1 \$\delta\$c8 36 \Omega xd4 cxd4 37 \Omega d5 \$\delta\$g7 38

 \$\Omega\$e7 \$\delta\$b7 39 \Omega f5 \$\delta\$h7 40 \$\delta\$c2 Ic6 41

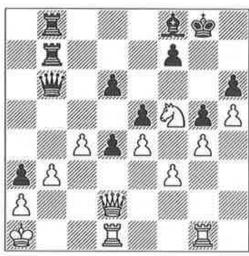
 \$\Delta\$c1 \$\delta\$b4 42 \Omega e7 Ic5 43 Ihd1 \$\delta\$b7 44

 \$\Omega\$f5 \$\delta\$f8 45 \$\delta\$d2 \$\delta\$g8 46 g4 \$\delta\$b6 47 Ih1

 \$\Delta\$c8 48 \$\delta\$e2 Ib7 49 Ihd1 Ic5 50 \$\delta\$f2

 \$\delta\$g7 51 Ig1 Ic8 52 Icd1 Icb8 53 \$\delta\$d2

 \$\delta\$f8



54 f4!? gxf4 55 g5 hxg5 56 罩xg5+ \$h8 57 豐g2 豐d8 58 罩g8+ \$h7 59 罩g7+ \$h8 60 罩g1 豐b6 61 罩h7+ \$xh7 62 豐g8+1-0.

R30 v BERLIN PRO

Last issue we gave Frank Holt's tournament table of his Giant Match between the Tasc R30 and Mephisto Genius 2.0, cross-referencing speed of game with (the R30's) various selectable styles of play.

Here are his equally comprehensive match statistics for his test between the R30 and the Mephisto Berlin Pro, from which it can be seen that the Mephisto pips the Tasc in almost every category, and wins convincingly overall - good for the already commercially successful Pro it's true, but can we have an R30 upgrade please?

STYLE	TIME	+	=	7
Normal	40 in 2	0	1	1
Normal	40 in 1	1	Ó	1
Normal	60 in 1	0	1	i
Active	40 in 2	1	1	Ó
Active	40 in 1	1	1	0
Active	60 in 1	1	1	0
Defensive	40 in 2	0	2	0
Defensive	40 in 1	0 .	0	2
Defensive	60 in 1	1 %	1	0
Solid	40 in 2	0	1	1
Solid	40 in 1	0	0	2
Solid	60 in 1	1	0	1
Offensive	40 in 2	0	1	1
Offensive	40 in 1	0	2	0
Offensive	60 in 1	1	1	0
SUB. TOT.		7	13	10
Normal	All in 90	2	0	0
Normal	All in 60	(1 En.	0	1
Normal	All in 30	1	1	0
Active	All in 90	0	0	2
Active	All in 60	1	11000	0
Active	All in 30	0	0	2
Defensive	All in 90	0	2	0
Defensive	All in 60	0	0	2
Defensive	All in 30	1	0	1
Solid	All in 90	0	0	2
Solid	All in 60	1 - 2	0	1
Solid	All in 30	10-51	0	1
Offensive	All in 90	2	0	0
Offensive	All in 60	1	0	1
Offensive	All in 30	1	0	1
SUB. TOT		12	4	14
G. TOTAL	Lates (Sec.)	19	17	24

Queen's Gambit Declined

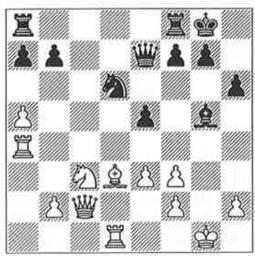
☐ Tasc R30 (Active)

■ Mephisto Genius 2

All in 90m. each

1 d4 d5 2 c4 e6 3 ②c3 ②e7 4 ②f3 ②f6 5 ②g5 0-0 6 e3 ②bd7 7 ②d3 dxc4 8 ②xc4 c5 9 0-0 ②b6 10 ②d3

R30 left book with this; MG2 move 7. 10...cxd4 11 ②xd4 e5 12 ②f3 皇g4 13 營c2 皇xf3 14 gxf3 h6 15 皇xf6 皇xf6 16 黨fd1 營e7 17 a4 皇h4 18 a5 ②d7 19 黨a4 皇g5



20 h4!

MG2 certainly wasn't expecting that! R30: +2.85, MG2: -1.30.

②xh4 21 ②h7+ 曾h8 22 ②f5 ②b8 23
 ③d5 營g5+ 24 黨g4 營h5 25 ⑤c7 ⑤c6 26
 ⑤xa8 萬xa8 27 a6 萬d8 28 萬xd8+ ⑥xd8
 29 營c5 曾g8 30 營xe5

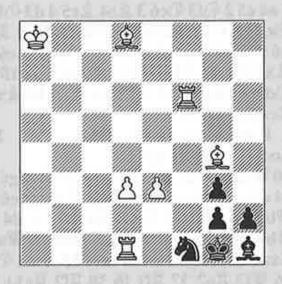
At last the e-pawn goes - it was annoying me.

g6 31 營d5 息f6 32 罩xg6+ 當f8 33 axb7 公xb7

These next few moves are still very tricky, but the R30 appears confident. 34 單g4 ②d8 35 營d6+ 皇e7 36 營e5 皇g5 37 萬d4 ②e6 38 營h8+ 含e7 39 皇xe6 含xe6 40 萬e4+ 含f5 41 營g7 營xf3 42 營xf7+ 皇f6 43 萬d4 含g5 44 營g8+ 含f5 45 萬d5+ 皇e5 46 營h7+ 含e6 47 營d7+ 含f6 48 營c6+ 含g7 1-0.

Mate in 7 TIMING TEST

from Frank Holt



Solution:

1 單c6 會f2 2 罩c2+ 會xe3 3 罩e1+ 會xd3 4 皇f5+ 會d4 5 皇f6+ 會d5 6 罩e8 g1豐 7 罩d8+ 0-1.

All computers were set to mate-solve level. PC programs run on 486/66

Mephisto Genius 2.0: 37m 07s

Fritz 2: 58m. 50s

Mephisto Risc 1Mb: 60m. 50s

Tasc R30: 2h. 55m.

Mephisto Berlin Professional: 4h. 5m.

Berlin 68000: 16h. 19m.

M-Chess 3.1: 60m

Chess Genius 1.0: 1h. 55m.

Giuoco Piano

☐ Tasc R30 (Solid)

■ Mephisto Berlin Professional

40 moves each per hour

1 e4 e5 2 包f3 包c6 3 & c4 & c5 4 d3 包f6 5 包c3 d6 6 包a4 & b6 7 包xb6 axb6 8 & g5 h6 9 & h4 ₩e7 10 0-0 0-0 11 ₩d2 & e6 12 & xe6 ₩xe6 13 a4 包h5 14 b4 ₩g6 15 b5 包d8 16 & e7 罩e8 17 包h4 ₩e6 18 & xd8 罩exd8 19 包f5 d5

R30 shows -0.06; B/Pro +0.21. The first signs of a win?

20 營e2 ②f4 21 營f3 單d7 22 罩fd1 營g6 23 c4 dxc4 24 dxc4 罩xd1+ 25 罩xd1 營e6 26 營b3 g6 27 ②e3 ②e2+ 28 營h1 ②d4 29 營b4 c6 30 f3 營g7 31 bxc6 bxc6 32 營xb6 罩xa4 33 營c7 h5 34 f4 exf4 35 營xf4 ②e2 36 營f3 罩a2 37 罩f1 f6 38 罩f2 罩a1+ 39 ②f1 ②d4 40 營d3 營e5

The R30 was a bit unsure about this move, taking 9 minutes over it. R30 has - 0.61, B/Pro +0.84.

41 營h3 ②e6 42 營d3 ②c5 43 營e3 ②xe4 44 單f4 ②d6 45 營f2 g5 46 單f3 g4 47 單f4 ②e4 48 營e3 g3 49 hxg3 罩xf1+! 50 含h2 罩xf4 51 gxf4 營e6 52 營e2 含h6 53 含g1 ②c5

B/Pro is still trying for the queen swap. 54 **營d2 營xc4** 55 f5+ **含g7** 56 **營d6 營e4** 57 **營xc5 營e1+** 58 **含h2 營e5+** 59 **營xe5** fxe5 0-1.

King's Indian

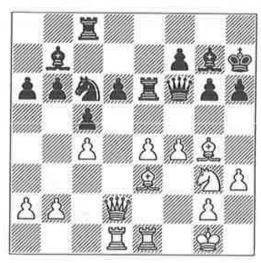
☐ Tasc R30 (Normal)

■ Mephisto Berlin Professional

40 moves each per hour

Move 20 coming up and almost no contact - just two armies waiting to go into battle. R30 shows +0.95, B/Pro -0.27.
20 f4 2c6 21 2d5 2d5 2d 2xf6+ 2xf6

Now B/Pro knows it is behind - 1.63; R30 + 1.94.



23 🙎 g4

Unusual to see a bishop pinning two rooks like this.

23... **三**d8 24 **皇**xe6 fxe6 25 b3 **②**d4 26 **皇**f2 **三**f8 27 **②**e2 e5 28 **쯸**d3 b5 29 cxb5 axb5 30 a4 bxa4 31 bxa4 **皇**c6 32 **②**xd4 exd4

Now B/Pro feels it has recovered - only minus 0.39. The R30 still shows a confident + 1.36.

33 皇g3 皇xa4 34 罩b1 皇d7 35 罩b6 豐e7 36 f5 罩f6 37 豐a6 豐d8 38 皇xd6 皇c8 39 罩b8 罩xd6 40 豐xc8 豐xc8 41 罩xc8 d3 42 曾f2 gxf5 43 exf5 d2 44 罩d1 皇c3 45 g4 曾g7 46 曾e2 皇b4!

The R30 has not been able to play \(\mathbb{Z}\)xc5 because of \(\mathbb{Q}\)d4+, but now he will have a job to get rid of the e- and c-pawns.

47 罩f1 曾f7 48 罩c7+ 曾f8?

Surely the move is 48...\$f6, to keep the king in the game. Now he will have restricted movement on the back rank only. 49 \$\mathbb{I}\$a1 \$\mathbb{I}\$d8 50 \$\mathbb{C}\$d1 \$\mathbb{I}\$e8 51 \$\mathbb{C}\$c2 \$\mathbb{C}\$g8 52 \$\mathbb{I}\$d7 h5 53 \$\mathbb{I}\$aa7 c4

The only sensible move, but took 6m. 54 f6 \mathbb{Z} c8 55 \mathbb{Z} g7+ \mathbb{C} f8 1-0.

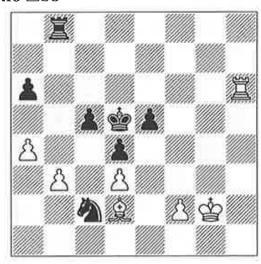
Giuoco Piano

□ **R30** (Solid)

■ Mephisto Berlin Professional

All moves in 90m. each

1 e4 e5 2 包f3 包c6 3 兔c4 包f6 4 包g5 d5 5 exd5 b5 6 兔xb5 營xd5 7 包c3 營xg2 8 營f3 營xf3 9 包xf3 兔d7 10 d3 a6 11 兔a4 包d4 12 兔xd7+ 包xd7 13 包xd4 exd4 14 包e2 c5 15 兔f4 g6 16 0-0 兔g7 17 罩fe1 0-0 18 包g3 罩fe8 19 包e4 罩e7 20 包d6 兔e5 21 兔g3 罩e6 22 含f1 罩xd6 23 兔xe5 罩b6 24 b3 罩e6 25 兔f4 罩ae8 26 罩xe6 fxe6 27 兔d6 e5 28 罩e1 g5 29 兔c7 含f7 30 a4 含e6 31 h3 罩g8 32 含g2 h6 33 罩e2 罩f8 34 罩e1 含d5 35 兔a5 包b8 36 兔d2 包c6 37 h4 gxh4 38 罩h1 包b4 39 罩xh4 包xc2 40 罩xh6 罩b8



A breakthrough? B/Pro is good in these situations. R30 -0.92; B/Pro +0.93. 41 當f3 罩xb3 42 當e2 罩a3 43 罩xa6 e4 44 dxe4+ 當xe4 45 罩e6+ 當d5 46 罩a6 d3+ 47 當f3 c4 48 罩a8 c3 49 臭e3 ②xe3 50 當xe3 d2 51 罩d8+ 當c4 52 罩d4+ 當c5 53 罩d8 罩xa4 54 罩c8+ 當b4 55 罩d8 罩a7 0-1.

Caro Kann

□ Berlin Pro

■ R30 (Offensive)

All moves in 30m. each

1 e4 c6 2 d4 d5 3 exd5 cxd5 4 \(\Delta\) d3 \(\Delta\) f6 5

c3 ②c6 6 ②f4 ②g4 7 Wb3 Wb6 8 Wxb6 axb6 9 ②e2 e5 10 ③xe5 ②xe5 11 dxe5 ②d7 12 ②b5 ②e7 13 ②f4 0-0-0 14 ②xd5 ②c5 15 ②e3 ③xe3 16 fxe3 ③xe5 17 0-0 ②d7 18 a4 ②c6 19 ②xc6 bxc6

The R30 has un-doubled the c-pawns and shows +0.53, but the B/Pro also shows a plus - of 0.81.

20 a5 \$\dip b7 21 a6+ \dip a7 22 \dip f2 f5 23 \dip e2 g6 24 h4?!

Why go to h4? h3 would stop the knight infiltrating.

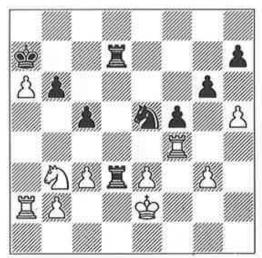
24... \(\text{Line 8} \) 25 \(\text{\te}\text{\texi}\text{\text{\text{\text{\text{\texi{\text{\texi{\texi}\texi{\text{\texi}\text{\texi{\text{\texi{\text{\texi{\texi{\texi}\texi{\texit{\text{\tex{

B/Pro +0.36, but R30 now +1.45.

28 公d2 罩ed8 29 公b3 罩f7

Berlin Pro looking at the draw, with 0.00 and no hints.

30 Za2 ②e5 31 Zf4 Zfd7 32 g3 Zd3 33 h5 Z8d7



34 **公d4!!**

Looked weird at the time, but paid off in the end.

34... \$\ddag{\pma} a8 35 h6 \$\dag{\pma} b8 36 g4!

The Pro is beginning to work it all out. 36...cxd4 37 exd4 單d5 38 dxe5 罩d2+ 39 當f1 罩c2 40 罩d4 罩xd4 41 cxd4 fxg4 42 e6 g3 43 a7+ 當a8 44 d5 罩f2+

B/Pro +2.96, R30 only minus 0.83! 45 \$\displays g1 \boxed{\mathbb{E}}e2 46 \boxed{\mathbb{E}}a1 g2 47 \boxed{\mathbb{E}}d1 \displays xa7 \displays and the R30 resigns.

1-0.

Sicilian

☐ Berlin Professional

■ Tasc R30 (Solid)

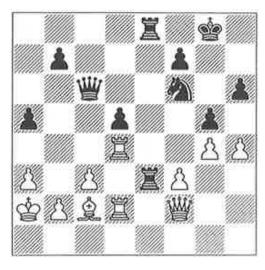
All moves in 30m. each

1 e4 c5 2 包f3 包c6 3 d4 cxd4 4 包xd4 包f6 5 包c3 d6 6 鱼g5 e6 7 營d2 a6 8 0-0-0 h6 9 鱼f4 鱼d7 10 包xc6 鱼xc6 11 f3 d5 12 營e1 鱼b4 13 a3 鱼a5 14 鱼d2 0-0 15 exd5 exd5 16 鱼d3 罩e8

R30 out of book with an evaluation of plus 0.24 and a hint of 17 ₩h4.

17 ②e2 **Qxd2**+

Now the Pro exits also, showing +0.06. 18 基xd2 數b6 19 數g3 基ad8 20 ②d4 食d7 21 食f5 食b5 22 ②xb5 數xb5 23 基d4 數c5 24 c3 基e3 25 基hd1 基de8 26 食d3 基3e5 27 含b1 a5 28 h4 基e3 29 含a1 數b6 30 含a2 基c8 31 食f5 基d8 32 基1d3 基e7 33 基d2 基de8 34 食c2 基e3 35 數f2 數c6 36 g4 g5?



Definitely a bad move, opening up the king's defences.

37 f4 罩e1

B/Pro shows +1.21; R30 -1.05.

38 fxg5 hxg5 39 hxg5 ②e4 40 **\(\Delta\)** xe4

Not 40 營xe1?? ②xc3+.

40... \(\bar{\bar{\pi}} 8xe4 \) 41 \(\bar{\pi} f6 \) \(\bar{\pi} xd4 \) 42 \(\bar{\pi} xd4 \) \(\bar{\pi} xf6 \) 43 \(\bar{\pi} xf6 \) \(\bar{\pi} 6 \) 44 \(\bar{\pi} 44 \) \(\bar{\pi} 45 \) \(\bar{\pi} 6 \) 46 \(\bar{\pi} xa4 \) \(\bar{\pi} xf6 \) 47 \(\bar{\pi} d4 \) \(\bar{\pi} f2+? \)

This just encourages the king to hide

amongst the pawns.

48 曾b3 f5 49 罩xd5 fxg4?

This loses the pawn to 50 \(\mathbb{Z}\)g5+. Surely 49...f4! was better.

50 \(\mathbb{I} g5+ \(\phi f7 \) 51 \(\mathbb{I} xg4 \) \(\mathbb{I} f5 \) 52 a4 b6 53 \(\mathbb{I} c4 \) \(\mathbb{I} f6 \) 54 \(\mathbb{I} c6 \) \(\mathbb{I} f1 \) 55 \(\mathbb{I} xb6 \) 1-0.

Scotch

☐ Berlin Professional

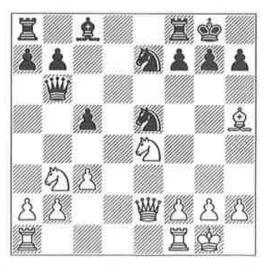
■ R30 (Normal) 60m

All moves in 60m, each

1 e4 e5 2 包f3 包c6 3 d4 exd4 4 包xd4 皇c5 5 皇e3 營f6 6 c3 包ge7 7 皇c4 包e5

At last B/Pro leaves book also. +0.06 and hint of 0-0.

12 ②b5 營b6 13 兔xc5 營xc5 14 營e2 dxe4 15 ②xe4 營b6 16 ②d4 c5 17 ②b3?



The move was 17 ©f3, when the advance of the c-pawn would not force the knight to move again.

17...c4 18 ②ed2 cxb3 19 豐xe5 ②c6 20 豐f4 bxa2 21 罩xa2 臭e6 22 c4 罩fd8 23 b3 ②b4 24 罩a4 ②d3

B/Pro -1.00; R30 +1.06. 25 幽g5 ②b2 26 罩a2 f6 27 幽f4 ②d3 28 幽h4 罩d4

Berlin Pro's game seems to be falling apart, but it evaluates itself at only -0.33

down. R30 has +1.26.



The R30 has made a mistake, but then again, that is what B/Pro has been waiting for... B/Pro +1.45; R30 -1.26.

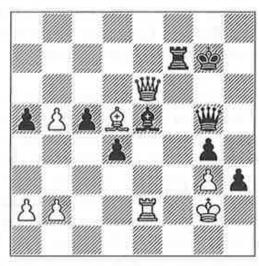
The Berlin Pro wins from defeat; the R30 made a mistake and the Mephisto took advantage of the situation.

King's Indian

- ☐ Tasc R30 (Normal)
- **■** Mephisto Berlin Professional

All moves in 60m, each

 置c3 營xh5 26 營c2 營g5 27 g3 fxg3 28 fxg3 2d7 29 ②c4 置f7 30 d6 2e6 31 dxc7 2xc4 32 2xc4 置xc7 33 2e6 置d8 34 置d3 置d4 35 罩xd4 exd4 36 e5+ 含h8 37 營e4 h5 38 營a8+ 含h7 39 2c4 含h6 40 營b8 2xe5 41 營xb6+ 含h7 42 含g2 營f5 43 2d5 含g7 44 2e4 營g5 45 置e2 置f7 46 營e6 h4 47 2d5 h3+



These are quite tense moments in the game. The R30 shows -0.45, B/Pro a full +1.06.

48 \$\dipha\$h2 \mathbb{I}e7 49 \mathbb{W}g8+ \dipha\$h6 50 \mathbb{W}f8+ \mathbb{W}g7 51 \mathbb{W}xg7+ \dipha\$xg7 52 \mathbb{I}e4 d3 53 \mathbb{I}xg4+ \dipha\$f6 54 b3 \dipha\$c7 55 \dipha\$f3 d2 56 \dipha\$xh3 \mathbb{I}e3 57 \dipha\$d1 \mathbb{I}e1 58 \dipha\$f3 \mathbb{I}f1 59 \dipha\$e2 \mathbb{I}g1 60 \mathbb{I}g8 \mathbb{I}e1 61 \dipha\$f3 \mathbb{I}f1 62 \dipha\$e2 \mathbb{I}g2 \mathbb{I}g1 63 \mathbb{I}f8+ \dipha\$e6 64 \mathbb{I}g8 \mathbb{I}e1 65 \dipha\$g4+ \diphe\$e5 66 \mathbb{I}g5+ \dipha\$d4 67 \mathbb{I}g7 \dipha\$d6 68 \mathbb{I}d7 \dipha\$d5 69 \dipha\$f3+ \diphe\$e5 70 b6 \diphe\$e6 71 \diphe\$g4+ \diphe\$e5 72 b7 \mathbb{I}h1+ 73 \diphe\$g2 \mathbb{I}h8 74 \diphe\$f2 \diphe\$d5

A Turnaround: R30+1.59, B/Pro-1.15.
75 \$\pmea\$6 \$\pmea\$6 76 \$\pmea\$57 \$\pmea\$6 77 \$\pmea\$6 \$\pmea\$6 79 \$\pma\$h7 d1Q 80 \$\pma\$xd1 \$\pma\$d8
81 \$\pmea\$65 \$\pma\$65 \$\pmea\$6 \$\pmea\$64 \$\pmea\$64 \$\pmea\$64 \$\pmea\$65 \$\pma\$66 \$\pmea\$66 \$\pma\$66 \$\pma\$65 \$\pma\$65 \$\pma\$67 \$\pma\$66 \$\pma\$66

The game ended another 20 moves later. The Berlin Pro really should have won this, but was thwarted by an excellent comeback from the R30.

1-0 (111).

GENIUS v KASPAROV

Richard's Lang's superlative program picks its moment to make the whole chess world sit up and take notice, knocking out the World Champion in the high-glitz, high-stakes PCA London Quickplay

As I was reading Frederic Friedel's piece on Fritz 3, which we published last issue, the thought struck me that although Richard Lang may be the world's best chess programmer, he certainly isn't the luckiest.

Not long ago he had the chagrin of seeing his *Genius* program lose the computer world championships because of a bug that might surface in - what? One game in a thousand, perhaps? Then he had to grit his teeth through all the ballyhoo that accompanied the Munich success of his arch-rival *Fritz*. Yes, these were only five-minute games, but how much of the media and the public would really understand the huge difference that this makes?

Then, when Richard's turn was announced for the London leg of the PCA Quickplay, was he (or rather, his *Genius 3.0* prototype, named 2.9) to have five minutes also? Not a bit of it. Instead, he was to be centre stage. First game of the event. Cannon fodder for the Great Gazza himself, still licking his wounds and hungry for revenge against yet another hateful machine. And, far worst of all, 25 minutes each. Oh, no! With five times longer to think, most grandmasters would assess their likelihood of victory as increasing by about the same factor.

What happened subsequently is history, of course. It's nice to think that if someone is good enough, for long enough, his luck will finally change. The first game of the double round between Genius and World Champion Garry Kasparov will undoubtedly go down in chess anthologies for as long as the game is played.

Of course, 25 minutes is far from long enough for the best player of all time (or any professional, or indeed any club player) to perform at anything like his best, but nevertheless this result does have real significance, and probably will be judged a major turning point in the relationship between human and electronic players.

It will also make all of us who are interested in computer chess reappraise the difference that sheer processing speed actually makes. I must confess that I, for one, thought in terms of 'diminishing returns' from ever - better hardware, and felt that the main breakthroughs and advances would be due to new discoveries and refinements in programming techniques getting more chess into the chess program, if you like. But it seems that Pentiums do for chess programs what spinach does for Popeye, and both Richard Lang and the Fritz progammers will cheerfully concede that these recent results would have been quite inconceivable without the aid of the phenomenal new Intel chip. This doesn't detract from their performance - on the contrary, it serves more to highlight the (usually latent) ability these programs already have.

One person I spoke to shortly after the result came through said he thought Kasparov had 'thrown' the match by kind arrangement with the sponsors. His cynicism may stand him in good stead in many walks of life (although he didn't look like a wrestler), but he has evidently never met a professional chess player at close quarters. We are about as likely to see Nigel

Mansell intentionally crash his car as a publicity stunt, as we are to witness Mr. Kasparov deliberately lose to a computer.

Returning to Richard Lang's achievement, I can't help but hope that the Deep Blue programming team - on whom millions have been lavished - are shuffling their feet and feeling small. Maybe they've even been crying all over their serried banks of parallel processors. They've been upstaged by one man who works from home, with a program anyone can buy for ninety quid, and a small box that sits on a desk and costs just a couple of thousand.

The PCA event is still in progress as this is written. I wonder what result Genius will have achieved by the end? Next issue we will of course have all the Genius games; some, hopefully, with grandmaster annotations. Until then, it will have to be enough to give the unadorned scores of the two most famous and widely publicised games in chess computer history.

Slav

☐ Garry Kasparov

■ Pentium Genius 2.9

PCA Quickplay, London 1994, Game 1

1 c4 c6 2 d4 d5 3 句f3 句f6 4 營c2 dxc4 5 營xc4 息f5 6 句c3 句bd7 7 g3 e6 8 息g2 息e7 9 0-0 0-0 10 e3 包e4 11 營e2 營b6 12 国d1 国ad8 13 包e1 包df6 14 包xe4 包xe4 15 f3 包d6 16 a4 營b3 17 e4 息g6 18 国d3 營b4 19 b3 包c8 20 包c2 營b6 21 息f4 c5 22 息e3 cxd4 23 包xd4 息c5 24 国ad1 e5 25 包c2 国xd3 26 營xd4 息c5 24 国ad1 e5 25 包c2 国xd3 26 營xd3 包e7 27 b4 息xe3+28 營xe3 国d8 29 国xd8+ 營xd8 30 息f1 b6 31 營c3 f6 32 息c4+ 息f7 33 包e3 營d4 34 兔xf7+ 含xf7 35 營b3+ 含f8 36 含g2 營d2+37 含h3 營e2 38 包g2 h5 39 營e3 營c4 40 營d2 營e6+41 g4 hxg4+42 fxg4 營c4 43 營e1 營b3+44 包e3 營d3 45 含g3 營xe4 46 營d2 營f4+47 含g2 營d4 48

₩xd4 exd4 49 ②c4 ②c6 50 b5 ②e5 51 ②d6 d3 52 \$f2 ③xg4+ 53 \$e1 ②xh2 54 \$d2 ②f3+ 55 \$xd3 \$e7 56 ②f5+ \$f7 57 \$e4 ②d2+ 58 \$d5 g5 59 ②d6+ \$g6 60 \$d4 ②b3+ 0-1.

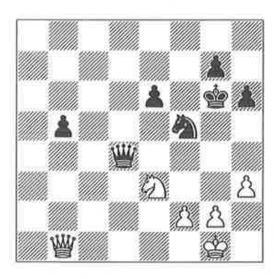
Oueen's Indian

□ Pentium Genius 2.9

■ Garry Kasparov

PCA Quickplay, London 1994, Game 2

1 d4 4\(f6 2 c4 e6 3 4\)f3 b6 4 a3 4\(b7 5 \) 2 c3 d5 6 2 g5 2 e7 7 e3 0-0 8 2 d3 2 bd7 9 cxd5 exd5 10 0-0 c5 11 \(\mathbb{Z}c1 \(\alpha\)e4 12 ¤fd1 ₩e8 16 b4 �e7 17 �e2 ¤c8 18 ₩b2 b5 19 ②d4 ②d6 20 \(\text{\ti}\text{\texi{\text{\texi}\tex{\text{\texi}\text{\text{\text{\text{\texi}\text{\\ti}\text{\tex{\texi}}}\text{\text{\text{\text{\text{\ti}}}}\titttt{\text{\tex{ **⋓**b3 �h5 22 �f5 ≌a8 23 �de2 �f6 24 g3 罩fe8 31 c3 罩d6 32 罩e1 罩ed8 33 罩cd1 鱼xd4 34 ②xd4 灃xf4 35 ②e2 灃e5 36 ≅xd6 ≅xd6 37 a4 ≅e6 38 ₩c1 ₩d6 39 axb5 axb5 40 @g3 \wxb4 41 \suxe6 fxe6 42 h3 幽c5 43 勾f1 幽d5 44 幽a1 幽e5 45 ₩a7 �h7 46 ₩d7 ₩d5 47 ₩e7 ₩d6 48 **쌀b7 쌀d5 49 쌀e7 쌀e5 50 쌀d7 公d6 51** ②e3 ②f5 52 Wd3 含g8 53 Wd8+ 含f7 54 ₩d7+ \$g6 55 ₩d3 ₩d4 56 ₩b1 1/2-1/2.



Forced to take the draw, Kasparov is eliminated from the tournament.

Show-Down at Countrywide Corral

'Uncle' Mike Healey on bounty hunters, computer gradings, and computer-stand brats...

It had seemed no time at all since we'd staggered back exhausted from last year's British at Dundee, but here we were again embarking on another fortnight of thrills and spills, this time in Norwich, so it was no good still greeting everyone "Wha hae Jummy" - it would have gone down with the Norfolk population like a lead balloon.

Now it's all over for another year, and we have to start looking forward to 1995 (in Swansea, boyo). So what happened at Norwich, either to us or (more importantly) to the computers?

Our team consisted of yours truly and never-a-dull-moment Eddy (nicknamed Edson after world famous footballer Edson di Nascimento Pele). Our main brief at Congress is of course to demonstrate the computers on the stand both to the players and the visiting public, then sit back and take zillions of orders. But it ain't quite like that. One fly in the ointment is that Edson has a propensity to challenge allcomers to play him at chess - the nerve of it. But it can have unexpected consequences. Late in the first week, Ed (club standard-ish) smashed a 183 graded player, and word went round that one of the guys on the Countrywide stand could actually play chess. As it happened, on the following day Anglia TV were there, and for whatever reason, (probably mistaken identity) they insisted on filming Healey taking on an Exclusive Rebell. A glittering TV career seemed to beckon, and the whole sequence was shown, apparently, that same evening, but having earlier rung base and asked them to video the carnage (I'd lost rather horribly), they managed to record the wrong channel! Just as well.

Get on with it, I hear you cry - how did the computers themselves fare? This year, by way of a change, we'd arranged in conjunction with the BCF a Nigel Short Challenge, where participants played eight half-hour games against the Nigel, and stood to win up to £85 if they did well.

The only disappointing thing was the low number of entries initially - I was not at all surprised, since the entry form had been worded ambiguously, and it had made the prize money seem distinctly meagre. When people arrived, and realised what was on offer, a lot more wanted to join in, but we took the decision to restrict it after meeting the first two likely lads. They'd moseyed over to our stand and sat down to play, but before long Eddy whispered to me darkly "They're bounty hunters". Sure enough, one of them looked as if he'd come straight out of a Clint Eastwood western, though as far as I could see, he'd had the decency to remove his gunbelt.

What Ed had meant is that they weren't remotely interested in buying a Nigel Short, or any other computer, or even a 10p Mephisto pen - they'd come to clean up, and one of them (grade 199) did precisely that! Nigel was trounced 6½-1½, bringing its overall grading performance down to around 191. Without Lee Van Cleef, or whatever his name was, it would have come out vastly better.

Which brings us to the thorny issue - one I've become increasingly aware of - namely how do you give a computer a fair grading? The argument used to be: "Do you go by their performance against other computers, or against real live humanoids under proper tournament conditions?"

Well, as we are constantly adjusting the gradings (based on thousands of computer v computer games) by using the yardstick of their performance against people, the two should be so close together that any difference is immaterial.

I think the crucial question now is how you judge a computer's performance against human opposition when the person may either (i) play it like another human opponent, or (ii) play anti-computer chess (assuming he has the capability), or (iii) play down a known weak line if he (or a collaborator!) is aware of one.

Take the original Conchess, for example; it's weak by today's standards, but it was/is good enough for me, apart from its paucity of openings. But, if I were compelled to play a Conchess in a tournament, I could win its queen every time by move 13, assuming I was White, because it can always be guaranteed to play the same sequence. I'd only have to tip off other people playing it, and the computer could almost end up with a minus grading, when in fact it's perfectly suitable for a hobby player. Extend this example to the case of a strong player playing a strong computer, and you have a similar scenario. At Eastbourne three years ago, a Lyon achieved a grading of about 160 against a group of players who all opened 1 c3, as it played down one particular line again, whereas against all the players who weren't in cahoots, it scored well over 220. These days, as people who who play computers in tournaments are invariably those who have agreed beforehand to do so, it can cause considerable distortions in the final reckoning.

It can be argued that a far better way is to go by results obtained from "How Good Is Your Chess" tests, but here one tends to run into logistical problems. For example, a par solving time might be one minute, so you put the computer onto the problem, and it finds the solution in three seconds. Leave it on for two minutes, and it finds a better move, in its opinion. Leave it on still longer, and it reverts to the original! Not only does this beg the question as to how long it took to find the solution, it also makes me wonder if the "correct" solution, as found by the original IM/GM etc., was in fact the best after all. So, any thoughts that readers have on this whole tricky issue would be welcomed.

Still on the subject of reader opinion, does anyone have any bright ideas as to what to do about the juniors, who flock to our stand at big congresses like the British? Ninety-five percent of them are sensible and well-behaved. Youngsters like the tiny Indian girl Tania Sachdev (who won enough silverware to open up a shop in Hatton Garden), or charismatic prodigy Luke McShane, and hundreds of others they're always welcome on our stand. Tania, if she wanted to know something, would look up at me with big brown eyes and say "Excuse me, Uncle". (My brother clearly has a lot to answer for).

Yet there's a small minority - noisy, ill-mannered, abusing the computers, impervious to requests to give someone else a turn. Tomorrow's yobs in the making without a doubt. Someone suggested we soundly box their ears. I didn't go along with this, as it can hurt one's knuckles rather badly - a quick poke in the eye, Basil Fawlty style, is more effective. (For any readers who are also NSPCC members - only joking, honest). But practical solutions are hard to find.

Perhaps some kind subscriber could lend us the complete works of Doctor Spock - either that or a manual on anti-terrorism. What bothers me though is that chess is reputedly an aggressive game, so probably these menacing mites are tomorrow's champions, and we need to pander to their every whim!

NEW PRODUCT REVIEW

It has become traditional for Novag to offer their higher-end models in two formats - a table-top and a portable - and they certainly seem to place more emphasis on the portable concept than any other manufacturer.

Continuing their 'gem' theme, the table-top version of their new program is called the Diamond, and when incarnated in their boardless portable, goes by the name of Sapphire (having now used up the names of all the precious stones, they will presumably have to think up something else next time).

The Diamond uses the same casing as their previous top model, the Scorpio, but with a few cosmetic improvements which make it smarter still. The Sapphire uses the same 'calculator style' boardless unit as the Ruby, on which moves are entered via a keypad while the game is played on a separate board - either your own full-size one, or the attractive pocket set that comes with the package. Presentationally, the main difference between the Sapphire and the Ruby is that the new model includes a leatherette carry-case to protect the computer while it's in your pocket.

Novag claim a USCF rating of 2360 in their literature for their new program. Take off 100 points to make the American figure compatible with Elo (and another 100 points to make it equate with Ply numbers), take off 600 and divide by eight, and you have BCF 209. Novag are sometimes (...how can I put this?) a little optimistic in their strength claims, but this time they seem to be fairly near the mark.

At the moment, we know of 27 rateable games on the program. A ten-game match (60 minutes each per game) against the

Mephisto Nigel Short resulted in a score of 7-3 for the Novag (+6, -2, =2), and we are halfway through a match (same times) against the Berlin, in which the Diamond is currently one point down on +1, -2, =2. Our other game was at 40 moves in 2 hours versus the Berlin Professional, which the Diamond lost. The sum of all this makes for BCF 203, but Novag also point to 214 BCF (four rounds) at the Norfolk Open, making 206 BCF so far.

Given the 209 claim, the logical choice of match opponent is the Saitek Risc 2500. Fortunately, a customer who now has both computers is doing a test; 4-3 to the Saitek as we go to press, but full results and games will appear next issue. Including this, our initial grade remains at 206 BCF.

Playing style is typical Novag - but now souped-up to a completely new level. On the one hand, the same funny habits crop up from time to time; early queen moves, moves with a complete disregard of tempo, weird endgame gaffes etcetera; on the other, expect phases of sharp, ingenious, and deadly accurate play which can turn a position around in a few moves. In short, completely unpredictable - this program is capable of losing to any serious computer - or of beating the R30!

At £249.99 for the Diamond and £199.99 for the Sapphire, these are obviously two excellent machines for the money. For any of you looking to add a true original to your chess computer collection, or if you have been looking for a junior sparring partner for your state-of-the-art exotica, one or other of these new Novags should definitely be on your shopping list. Naturally, Countrywide Computers will be delighted to take your order!

The match between the Nigel Short and the Diamond produced some really excellent games. In the phase just after the opening, and also in the ending, N/S frequently showed itself at least a match for the Novag; its problem was in coping with the sharpness of the Diamond's middlegame play.

The first game, however, was the Short's finest performance of the match.

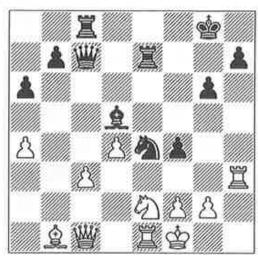
Caro Kann

☐ Novag Diamond

■ Mephisto Nigel Short

Game 1, 60 minutes each.

1 c4 c6 2 e4 d5 3 exd5 cxd5 4 d4 ②f6 5 ②c3 ②c6 6 兔g5 營a5 7 兔xf6 exf6 8 cxd5 兔b4 9 營d2 兔xc3 10 bxc3 營xd5 11 ②e2 0-0 12 ②f4 罩e8+ 13 兔e2 營e4 14 含f1 營e7 15 兔d3 營c7 16 罩e1 兔d7 17 ②e2 罩ad8 18 營c2 g6 19 h4 兔e6 20 h5 f5 21 營d2 ②a5 22 hxg6 fxg6 23 營h6 罩e7 24 罩h4 ②c4 25 營g5 ②d6 26 a4 ②e4 27 營c1 罩c8 28 營a3 兔d5 29 罩h3 f4 30 營c1 a6 31 兔b1



31...f3!

The Diamond had expected 31...\(\Delta\)xc3, but fell to -0.69 after this. N/S showed +0.87.

32 萬xf3 ②xc3 33 萬h3 ②xa4 34 豐g5 豐d6 35 萬h5 ②c3 36 ②xc3 萬xe1+ 37 當xe1 罩xc3 38 皇xg6 hxg6 39 豐xd5+ 豐xd5 40 罩xd5 罩c4

The dust has settled, and the resulting endgame appears to be quite finely balanced. N/S now plays extremely well to secure the full point.

41 \(\mathbb{\text{d}} \) \(

Sicilian

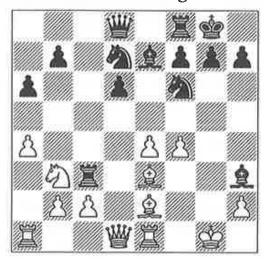
- ☐ Mephisto Nigel Short
- Novag Diamond

Game 2, 60 minutes each.

1 e4 c5 2 🖄 f3 d6 3 d4 cxd4 4 🖄 xd4 🖄 f6 5 🖄 c3 a6 6 \(\) e2 e5 7 \(\) b3 \(\) e7 8 0-0 \(\) e6 9 a4 \(\) bd7 10 \(\) e83 0-0 11 f4 \(\) Ec8 12 g3?

A loosening move that starts the trouble.

12... 魚h3 13 單e1 exf4 14 gxf4 罩xc3!



An excellent speculative sacrifice, which the Novag must have made on pro-

grammed 'principles', since it is quite unclear that it will necessarily succeed.

Round 3 was anything but a 'boring draw', with pretty much the whole game being played on a knife-edge, and the outcome uncertain until the very end. At one stage White looks in some danger, but after all the complications comes out the exchange up. Undaunted, the N/S makes its bishop look the equal of Black's rook, and through active and resourceful play, succeeds in saving half the point.

English

☐ Novag Diamond

■ Mephisto Nigel Short

Game 3, 60 minutes each.

1 c4 e5 2 ②c3 ②f6 3 ②f3 ②c6 4 g3 兔b4 5 兔g2 0-0 6 0-0 罩e8 7 ②d5 ②xd5 8 cxd5 ②d4 9 ②e1 c6 10 e3 ②b5 11 d3 ②c7 12 ②c2 兔f8 13 d4 ②xd5 14 dxe5 罩xe5 15 f4 罩e6 16 兔xd5 cxd5 17 ②d4 罩h6 18 營f3 b6 19 營xd5 兔a6 20 罩d1 罩c8 21 營b3?! 兔c4 22 營a4 a6 23 ②f5 罩hc6 24 ②d4 罩c5 25 兔d2 兔d5 26 營xa6 營e8 27 營d3 兔c4 28 營b1 兔d5 29 罩e1 兔e4

29... \(\mathbb{Z}\)c2!? would pose even more problems - 30 \(\mathbb{Q}\)xc2?? \(\mathbb{Z}\)e4! mates, or if 30 e4, \(\mathbb{Q}\)c5!? leads to complications definitely in Black's favour.

30 營d1 鱼e7 31 鱼b4 罩c4 32 鱼c3 鱼f6? 33 句b5! 營e6 34 句d6 鱼xc3 35 bxc3 罩xc3 36 句xc8 罩xc8 37 罩c1 罩a8 38 營d4 d5 39 罩e2 h6 40 罩c7 罩c8 41 罩xc8+ 쌀xc8 42 含f2 營c1! 43 營xb6 營h1 44 罩b2 營xh2+ 45 含e1 營xg3+ 46 含d2 h5! 47 營a6 d4 48 罩b8+ 含h7 49 營e2 g6 50 罩b3 身f3 51 exd4?! 營xf4+ 52 營e3 營h2+ 53 含c1 身d5 54 罩b2 營h1+ 55 含d2 營a1 56 罩c2 身xa2 57 營f4 身d5 58 罩c7 營h1 59 罩xf7+! 身xf7 60 營xf7+ 含h6 61 營f8+ 含g5 62 營e7+ 含g4 63 營e6+ 含h4 64 營xg6 營f3 65 營e8 含g3 66 營g8+ 含f2 67 營g5 營e2+ 68 含c3 營e3+ 69 營xe3+ 含xe3 70 d5 h4 ½-½-

So, with three games played, the score is dead level at 1½ apiece. The ominous sign for the Mephisto is that it has had to work rather harder, and the next game is a good example of just how tricky the new Novag can be - N/S should have had this one!

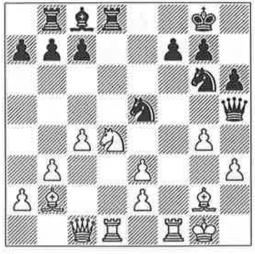
English

☐ Mephisto Nigel Short

■ Novag Diamond

Game 4, 60 minutes each.

1 c4 e5 2 公c3 公c6 3 公f3 公f6 4 g3 兔b4 5 兔g2 0-0 6 0-0 e4 7 公e1 兔xc3 8 dxc3 h6 9 公c2 罩e8 10 公d4 公e5 11 b3 d5 12 cxd5 豐xd5 13 c4 豐a5 14 豐c2 罩d8 15 兔b2 豐c5 16 罩ad1 e3 17 fxe3 罩b8 18 h3 公g6 19 含h2 豐h5 20 豐c1 公g4+ 21 含g1 公4e5 22 g4!



22...②xg4?!

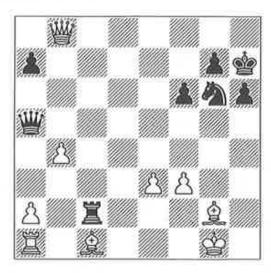
The Diamond has had the worse of the early stages, and now has no illusions

about the soundness of this move, showing a gloomy evaluation of more than two pawns down. The new program seems to share the trait of the Scorpio/Diablo in frequently sacrificing a piece for two pawns in front of the enemy king. In practical terms, the sac here does at least provide some hope of counterplay - as the outcome convincingly shows - and the alternative was to be slowly pushed back and crushed.

23 hxg4 魚xg4 24 匂f3 f6 25 罩d5! 罩xd5 26 cxd5 罩d8 27 營xc7 罩xd5 28 營xb7 罩d7 29 營b8+ 含h7 30 罩c1 營a5 31 罩a1? 魚xf3 32 exf3 罩d2 33 兔c1?

33 \(\hat{L}\)xf6! would have taken all the danger out of the situation and left White clearly better.

33... \(\mathbb{Z} \) c2 34 b4?



One mistake too many - 34 \(\mathbb{2}\) a3 and White can continue.

34... 当g5! 35 当h2 心h4 36 含h1 罩xg2 37 当h3 罩g3 38 当h2 心xf3

With mate in 5 called.

39 **Qb2 公xh2** 40 **Qe5 營xe5** 41 **当f1 營e4+** 42 **当f3 營xf3+** 0-1.

In the fifth, the N/S again showed that its endgame is usually as good or better than that of the Diamond, but the pawn it won did not prove to be worth more than half a point.

Queen's Gambit Declined

- ☐ Novag Diamond
- Mephisto Nigel Short Game 5, 60 minutes each

1 d4 d5 2 c4 e6 3 2 c3 2 f6 4 2 g5 2 e7 5 e3 0-0 6 2f3 h6 7 2h4 b6 8 cxd5 2xd5 9 皇xe7 竇xe7 10 ②xd5 exd5 11 罩c1 皇e6 12 \(\partial d\) d3 c5 13 dxc5 bxc5 14 0-0 \(\bar{Q}\) d7 15 e4 dxe4 16 &xe4 \(\mathbb{Z}\)ab8 17 b3 \(\Delta\)f6 18 **Qb1** □ fd8 19 | we2 □ d5 20 □ fd1 □ bd8 21 臭d7 25 獣e7 臭b5 26 獣a7 獣f8 27 罩e5 豐c8 28 罩xd5 匂xd5 29 a4 �d7 30 匂e5 **Qe8 31 Qe4 Wc7 32 Wxc7 公xc7 33 含f1** f6 34 🖾 d3 c4 35 bxc4 🗟 xa4 36 🕸 e2 🗟 b3 37 c5 a5 38 含d2 含f7 39 c6 含e7 40 公c5 **Qd5 41 Qxd5 ⊙xd5 42 ⊙e4 ⊙b4 43 c7** \$d7 44 Ød6 \$xc7 45 Øe8+ \$b6 46 \$c3 ଏପର+ 47 🕸c4 ଏମି4 48 ଏଠxg7 ଏଠxg2 49 ②e8 ②f4 50 ②xf6 ②xh3 51 ②d5+ \$c6 52 2e7+ \$\pm\$d7 53 2g8 h5 54 2f6+ \$\pm\$c6 55 ②xh5 ②xf2 56 ②f6 ②d1 57 ②d5 ②b2+ 58 \$b3 \$xd5 59 \$xb2 \$c5 60 \$a3 \$b5 61 \$b3 a4+ 62 \$a3 \$a5 63 \$a2 \$b4 64 \$b2 a3+ 65 \$b1 ½-½.

The sixth was one of the Diamond's best displays, in which it attoned for some rather dubious opening sorties by subsequently producing a lethal attack with its minor pieces.

Benoni

- ☐ Mephisto Nigel Short
- Novag Diamond

Game 6, 60 minutes each

1 d4 c5 2 d5 d6 3 e4 ②f6 4 ②c3 g6 5 f4 ②g7 6 ②f3 豐a5?! 7 ②d2 0-0 8 ②d3 ②a6 9 e5 ②d7 10 ②e4 ②b4?! 11 ②e2 豐c7 12 exd6 exd6 13 ②c3 罩e8 14 ②xg7 罩xe4!? 15 ②h6 ②f6 16 0-0 ②fxd5 17 ②d2 罩e8 18 ②c4 ②f5 19 罩c1? ②xa2 20 罩a1 ②dc3! 21 bxc3 ②xc3 22 豐xd6 豐xd6 23

With a mate in 7 announcement. 30 g3 罩xf1+ 31 堂g2 罩f2+ 32 堂h3 罩h1 33 罩a8+ 堂f7 34 罩f8+ 堂e7 35 罩e8+ 堂xe8 36 堂h4 罩fxh2+ 0-1.

The Diamond is now on a roll, with game 7 being another powerful exhibition of what it can do given open lines and active pieces. First it traps a knight in the middle of the board, and later leaves one of its own *en prise* for three consecutive moves. (Two Whites played in error for the Novag, so 9 and 10 were Blacks!).

Petroff

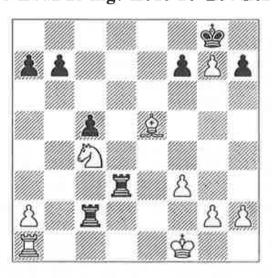
- ☐ Novag Diamond
- **■** Mephisto Nigel Short

Game 7, 60 minutes each.

1 e4 e5 2 公f3 公f6 3 d4 公xe4 4 单d3 d5 5 公xe5 单d6 6 0-0 0-0 7 c4 单xe5 8 dxe5 公c6 9 单f4 单e6 10 cxd5 豐xd5 11 单c2 罩ad8 12 豐xd5 单xd5 13 罩d1 公b4 14 公a3 罩fe8 15 单a4 c6 16 罩d4 c5 17 罩dd1 单c6 18 单xc6 公xc6 19 f3 公d4 20 罩e1 公f6 21 exf6

It is hard to credit here that this pawn will later queen!

21...②e2+ 22 罩xe2 罩xe2 23 含f1 罩xb2 24 臭e5 罩bd2 25 fxg7 罩8d3 26 ②c4 罩c2



27 &f6!! h5 28 罩e1! 含h7 29 罩e2! 罩d1+30 含f2 罩dc1 31 公d2 c4 32 罩e8 罩xd2+33 含g3 h4+34 含f4

40 \wxg4+ \\$f7 41 \\\ h7+ \\$e8 42 \\\ c8+ 1-0.

Now down by 2½ points, the Short badly needed a win and achieved it in a remarkable game. Some of the positions toward the end look more like compositions than something between two computers, and the Diamond very nearly succeeds in wriggling out an appalling situation, confronted as it is with three united passed pawns bearing down upon it.

Sicilian

- □ Novag Diamond
- **■** Mephisto Nigel Short

Game 8, 60 minutes each.

1 e4 c5 2 ②f3 e6 3 d4 cxd4 4 ②xd4 ②f6 5 ②c3 d6 6 \(\text{ \frac{1}{2}}\) e2 a6 7 0-0 \(\text{ \frac{1}{2}}\) e7 8 f4 0-0 9 會h1 營c7 10 a4 公c6 11 皇e3 罩e8 12 營d2 ②xd4 13 營xd4 e5 14 營b6 營xb6 15 2xb6 exf4 16 \(\mathbb{Z}\)xf4 \(\mathbb{Q}\)e6 17 \(\mathbb{Q}\)d4 \(\mathbb{Q}\)d7 18 **夕d5 皇g5 19 單f2 罩ac8 20 皇c3 f5 21 皇f3** এxd5 22 exd5 勾f6 23 罩e1 勾e4·24 罩fe2 **≜h4** 25 g3 **≜**xg3 26 hxg3 **⊴**xg3+ 27 曾g2 @xe2 28 黨xe2 黨xe2+ 29 魚xe2 g5 30 eg3 Ic7 31 2d3 If7 32 2b4 h5 33 2xd6 f4+ 34 &f2 h4 35 2c5 g4 36 d6 g3+ 37 \$f3 h3 38 &c4 h2 39 \$g2 f3+ 40 曾h1 f2 41 息f1 罩d7 42 息c4+ 曾h7 43 臭d3+ 曾h6 44 臭e3+ 曾h5 45 臭f4 曾g4 46 **Qe5 含f3** 47 **Qf1** b5 48 axb5 axb5 49 **Qh3 罩a7 50 Qg2+ 曾g4 51 b3 罩f7 52 ≜f1** b4 53 **&d4 \(\end{a}f3** 54 **\(\end{a}e5 \(\end{a}a7** 55 皇g2+ 曾g4 56 皇f1 罩b7 57 皇c4 罩f7 58 &f1 \(\bar{2}\)d7 59 \(\bar{2}\)b5 \(\bar{2}\)f3! 60 \(\bar{2}\)c6+ \(\bar{2}\)e3 61 皇g2 曾e2 62 皇xg3 罩g7 63 皇xf2 曾xf2 64 ②c6 常g3 65 ②d7 罩xd7 66 c3 bxc3 67 b4
□xd6 68 b5 □d1+ 0-1.

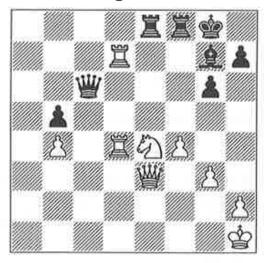
Vienna

☐ Mephisto Nigel Short

■ Novag Diamond

Game 9, 60 minutes each

1 e4 e5 2 ②c3 ②f6 3 g3 ②c5 4 ②g2 d6 5 ②f3 ②c6 6 d3 ②g4 7 0-0 ②d4 8 ②e3 0-0 9 ②a4 ②xf3+ 10 ②xf3 ③xe3 11 ③xg4 ②xg4 12 ₩xg4 ②d2 13 罩ad1 ₩e8 14 b3 ②h6 15 d4 exd4 16 罩xd4 ₩e5 17 罩fd1 罩ae8 18 ₩e2 �h8 19 f4 ₩a5 20 罩d5 ₩b4 21 c4 ₩a3 22 ②c3 f5 23 �h1 a6 24 c5!? ₩b4 25 ₩e3 fxe4 26 cxd6 cxd6 27 〖xd6 ₩a5 28 〖1d5 b5 29 a4 g6 30 〖d4 ②g7 31 b4 ₩c7 32 〖d7 ₩c6 33 axb5 axb5 34 ②xe4 �g8



If one didn't know that computers are incapable of such low cunning, one might think that with this seemingly innocuous move the Diamond is actually enticing White to check - which he does - and so fall into a deadly trap.

35 對b3+ 對e6 36 對xe6+ 罩xe6

Now White is stuck - either the knight or the d4 rook has to go.

37 \(\mathbb{Z}\)xg7+ \(\mathbb{Z}\)xg7 38 \(\mathbb{Z}\)d7+ \(\mathbb{Z}\)g8 39 \(\Omega\)c3 \(\mathbb{Z}\)c1+ 40 \(\mathbb{Z}\)g2 \(\mathbb{Z}\)c1 41 \(\Omega\)xb5 \(\mathbb{Z}\)b8 42 \(\Omega\)d4 \(\mathbb{Z}\)f3 \(\mathbb{Z}\)d1 45 \(\Omega\)d2

h5 46 \$\displays 2 \pm bc1 47 \pm b7 \pm e1+ 48 \$\displays d3 \pm cd1 49 \$\displays 2 \pm h1 50 h4 \$\displays f8 51 \$\displays c3 \pm hg1 52 \$\alpha e4 \pm d8 53 \pm b6 \pm c1+ 54 \$\displays b2 \pm e1 55 \$\alpha g5 \pm d2+ 56 \$\displays c3 \pm g2 57 \$\displays d4 \pm kg3 58 \pm kg6 \pm g4 59 \pm f6+ \$\displays g7 60 \pm f5 \pm kh4 61 \$\alpha e4 \pm h2 62 \pm g5+ \$\displays h6 63 \$\alpha f6 \pm e6 64 \$\alpha g8+ \$\displays h7 65 f5 \pm a6 66 f6 \pm a4+ 67 \$\displays c3 \pm h3+ 68 \$\displays c2 \pm g4 69 \pm kg4 \pm kg4 70 \$\alpha e7 g3 71 f7 \pm h2+ 72 \$\displays d3 \pm f2 73 \$\alpha c6 g2 0-1.\$

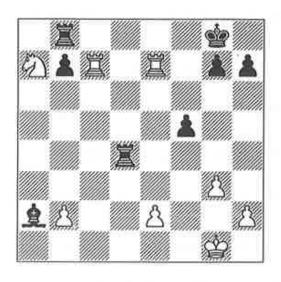
Dutch

☐ Mephisto Nigel Short

■ Novag Diamond

Game 10, 60 minutes each.

1 d4 f5 2 包f3 包f6 3 g3 e6 4 兔g2 d5 5 c4 包bd7 6 包g5 兔b4+ 7 兔d2 兔xd2+ 8 包xd2 豐e7 9 0-0 c5 10 dxc5 包xc5 11 cxd5 包xd5 12 罩c1 包e3!? 13 fxe3 豐xg5 14 罩f4 包d7 15 豐b3 豐e7 16 罩c7 0-0 17 罩fc4 罩b8 18 包f3 豐f6 19 包d4 包b6 20 罩c1 罩d8 21 包b5 包d5 22 兔xd5 exd5 23 包xa7 兔e6 24 豐b4 d4 25 exd4 罩xd4 26 豐e7 豐xe7 27 罩xe7 兔xa2 28 罩cc7



28...g6 29 \(\text{Zxh7} \) \(\text{Zd2} \) 30 \(\text{Zhg7+} \) \(\delta \text{F8} \) 31 \(\text{Le8} \) 32 \(\text{Zxg6} \) \(\text{Zexe2} \) 33 \(\text{Zf6+} \) \(\delta \text{e8} \) 34 \(\text{Zc8+} \) \(\delta \text{e7} \) 35 \(\text{Zxf5} \) \(\delta \text{Lf3} \) 39 \(\text{Db5} \) \(\text{Zg2+} \) 40 \(\delta \text{F1} \) \(\text{Zxh2} \) 41 \(\text{Dd4+} \) \(\text{Zxd4} \) 0-1.

SPECIFICATIONS: Novag Diamond / Sapphire

• Microprocessor: H8

• Program size: 64k ROM

129k RAM

• Hash Table: 118k

• Clock Speed: 26.6 Mhz

• Battery Life: 20-30 hours (Sapphire only)

• Size (Sapphire) 6" x 3"

• Size (Diamond) 9" x 9" (board, not unit)

• Levels: 56

• Opening Book: 36,000 ply

• Plus User Addn: 3,000

• Take-back: 400 ply

• Solve Mate: Most-in-8

• Mate Announce: Up to Mate 14

• Max. Search: 28 ply

• Learn Function: 140 positions

Autoplay: Yes

• Resign: Yes

The games against the Berlin we will leave until the final result is known, so we will finish with the one and only game we have played with the Diamond at full time limits - against the wonderful Berlin Professional. This Mephisto, as Frank Holt proves conclusively elsewhere in this issue, is at least the equal of the R30 in objective strength, and we thought that the Diamond deserved the compliment of being played against it.

An interesting opening was followed by quiet a quiet middlegame which seemed to be heading for a draw. The the Diamond decided to 'activate its king' while there were still three enemy pieces around - and this proved to be a fatal misjudgement, the Diamond being caught in a lethal crossfire.

Queen's Gambit Accepted

□ Novag Diamond

■ Mephisto Berlin Professional

40 moves in two hours each

1 d4 d5 2 c4 dxc4 3 e4 e5 4 🖾 f3 exd4 5 ②xc4 ②b4+ 6 ②d2 ②xd2+ 7 ˝Dxd2 ②c6 8 0-0 ⑥f6 9 e5 ⑥g4 10 h3 ⑥h6 11 ⑤b3 ⑥f5

The first move made out of book, and one which took Pro out also.

12 单b5 单d7 13 Wd3 心h4 14 心fxd4

Made with a +0.80 eval. B/Pro: -0.15. 14...公xd4 15 皇xd7+ 營xd7 16 營xd4 營xd4 17 公xd4 0-0-0 18 公b3 單d5 19 f4 單hd8 20 罩ac1 c6 21 全f2?

The start of a journey to nowhere.
21...公g6 22 \$\displaysis 3 f6 23 exf6 \$\mathbb{L}e8+ 24\$\$ \$\displaysis f6 24 exf6 \$\mathbb{L}e8+ 24\$\$ \$\displaysis f3 \$\mathbb{L}d3+ 25 \$\displaysis g4 gxf6 26 \$\mathbb{L}f2 \$\ointimes e7 27\$\$ f5 \$\mathbb{L}g8+ 28 \$\displaysis f4 \$\ointimes d5+ 29 \$\displaysis e4 \$\mathbb{L}e3+ 30\$\$ \$\displaysis d4 \$\mathbb{L}eg3 31 \$\mathbb{L}cc2 \$\mathbb{L}d8 32 \$\displaysis e4 \$\mathbb{L}e3+ 35 \$\displaysis c3 \$\displaysis d4 \$\mathbb{L}e5 34 \$\mathbb{L}cd2 \$\ointimes e3+ 35 \$\displaysis c3 \$\displaysis d1+ 36 \$\mathbb{L}xd1 \$\mathbb{L}xd1 \$\mathbb{L}xd1 \$\mathbb{L}g4 \$\mathbb{L}e3+ 0-1.\$\$

The S/S Rating Guide

For the benefit of new readers, the hieroglyphics on the back cover are explained, whilst regulars may be interested in the news from Ply...

The internationally recognised standard for assessing the strength of chessplayers is called the Elo Rating System, after its inventor Professor Arpad Elo. For UK players, there is also the system operated by the British Chess Federation. Both systems express strength in the form of a score based on results. The Elo figure can be translated into BCF by the formula 'Elo minus 600, divided by 8'. Our back cover has two rating lists, both of which have been built up over many years. The Selective Search list (abbreviated to 'S/S') contains games played at 'Game in 60 minutes' or longer, whilst the Ply list only has games played at 40 moves in 2 hours, the most frequently used time setting in international tournaments. 'Ply' is the name of a Swedish magazine devoted to chess computers, and their rating list is run as part of an ongoing university project. It is therefore free of commercial considerations of any kind. They kindly allow Selective Search to make use of their data.

Unfortunately Elo points are not identical from one country to the next, so one should add 100 points to the *Ply* figures to arrive at an 'English translation'; i.e. a Swedish player with an Elo of 2259 would be regarded as around 2359 over here. Beware of manufacturer's claims regarding 'USCF' grades. This is the American system, and runs at another 100 points higher than the UK, or 200 points more than *Ply*!

All the computers are ranked in strength order according to the S/S list, which just shows 'name, rank and number' plus the quantity of games on which the grade is based. The *Ply* list shows the Elo rating (without the 'add 100' adjustment mentioned above), the BCF equivalent, the number of games taken into

consideration, plus another column marked '+/- Elo'. This indicates the margin of error. For example, a computer graded at 2259 on the basis of 250 games has a margin of error of 59 Elo; i.e. the figure of 2259 might actually be as low as 2200, or as high as 2318; however the median figure is more likely to be correct than those at the extremes. The higher the number of games played, the more reliable the grade, so this 'plus or minus' figure comes down progressively as more and more games are played. Fortunately, the ratings of humans are not subjected to such rigours - your grade is your grade, for a whole year at a time!

To put the figures into context, 1000 Elo (BCF 50) is beginner standard. From here to 1400 (BCF 100) is good hobby player / weak club player territory. 1600 (125) would be regarded as a slightly better than average club player, and 2000 (175 BCF) as a very good one. Anyone over 2200 (BCF 200) is seriously strong by most standards, very likely playing for his county or in the top section of weekend congresses. A 2350 (219 BCF) player might well hold a title (perhaps FIDE Master, abbreviated to FM); a 2400 (BCF 225) player could be an International Master (IM), and 2500 (BCF 237) is Grandmaster (GM) standard. World Champion Garry Kasparov is Elo 2805 at the moment, or 257 BCF - the highest rating of all time.

Rating News From Ply

We are pleased to say that we now have *Ply* information back on stream, so this feature will be appearing regularly again. Unfortunately, we cannot update their whole list this time if the magazine is to keep its date with the printers. However, we can tell you that Genius 2.0 is at the top of their list on 2346. No-one has donated them with an R30 or a Genius 68030, so their top 'dedicated' is naturally the Berlin Pro, on 2264. They have started tests on the new GK2100 from Saitek, which we review next issue, and also the Novag Diamond / Sapphire, Fritz 3 and a new King program from Tasc.

	S/S				Ply				S/S			Ply				
ſ	Rank	Computer	BCF	Garnes	Elo		+/-	Games	Ran	k Computer	BCF	Games	Elo		+/-	Games
1	1	Meph Genius 68030	228	49		equiv	EIO	125	68	Saitek Gal/Ren.	157	976	4	equiv.	Elo	20
- 1	2	Meph Berlin Pro	225	21				16	69	Conchess 6	155	107	72	120	25	3
- 1	3	Tasc R30 (Active)	225	38	5	-	-	-	70	Fid Excellence 4	155	1740		*	-	57/
- 1	4 5	Meph Lyon 68030	218	374	2258 2235	207 205	59 37	250 451	71 72	Novag Expert 4 Conchess Plymate 4	155 153	962 372		370	51	(E)
-	5	Meph Vanc. 68030 Meph Risc JMB	216 216	375 1046	2218	204	31	593	73	Saitek Turbo Kasp 4	153	512	-	(40)	N.	
_	7	Meph Port 68030	214	460	*			100	74	Fid Elite C	152	182			5	380
	3	Saitek Risc 2500	212	499	2221	203	30	628	75	Mephisto MM2	151	781		983	-	(#)
- 1	9 10	Saitek Ren.Sparc 20	212 206	234 27	2194 2164	202 194	47 27	234 778	76	Saitek Gal. / Ren. B4 Fid Exc./ Des. 2000	151 150	37 1646	1736	[4]	49	202
_	11	Novag Sapph/Diam'd Meph Vanc. 68020/12	205	1481	2152	194	23	1029	78	Saitek Priama / Blitz	149	306	1750			202
	12	Meph Lyon 68020/12	204	2492	2108	189	27	721	79	Conchess 4	148	509	1730	141	18	1582
_	13	Meph Vanc. 68000	203	334	2122	190	32	538	80	Novag Super Const.	147	3689	1732	141	37	350
_	14 15	Meph Berlin	202 200	658 1713	2128	- 191	45	324	81	Novag Super Nova Novag Supremo	147 144	411 28		100		
_	16	Meph Port. 68020 Fid Elite 68030 V9	200	599	2105	188	25	857	83	Meph Europa/M.Polo	143	240			3	
_	17	Meph Lyon 68000	197	1325	÷	200	100	181	84	Novag Super VIP	143	335	5	151	-	22.4
_	18	Meph Almeria 68020	196	1003	± 0001	105	90	843	85	Fid Prestige / Elite A	142	856	建	*	100	:20:
	19 20	Meph Port. 68000 Fid Mach 4/Elite V7	193 193	1478 1396	2081	185	24	- 043	86 87	Fid Sensory 12 Saitek Superstar 36K	141 139	1340 997	2			
-	21	Mephisto Nigel Short	192	5	2029	179	34	437	88	Conchess 2	139	1096		100	-	26.1
_	22	Saitek Brute Force	188	223	4	4	*	-	89	Novag Const. 3.6	137	825	*			
_	23	Fid E1. 68000 x2 V5	188	258	*	34	(4)	-	90	Novag Qualtro	137	585			-	140
_	24 25	Meph Roma 68020 Meph Polgar 10	186 186	1043 609	2000	175	25	805	92	Novag Primo / VIP Meph Mondial 2	137 136	354 31	Ē.		ě	
_	26	Novag Diablo/Scorpio	186	1202	-	3.		121	93	Fid Elite B / Original	133	236		361	÷	147
_	27	Meph Almeria 68000	184	1025	7.	-	-	*	94	Meph Mondial I	131	247			ř.	31
_	28	Meph Dallas 68020	184	996	1997	175	15	2218	95	Novag Const. 2.0	130	1289	1559	120	39	386
_	29 30	Fid Mach 3 68000 v2	181 180	5009 626	1960 1976	170 1 7 2	27 22	659 1002	96	CXG S.Ent/Adv.Star CXG 3000	128 123	922 17		(5)	0	- 50
_	31	Meph Milano Meph MM5	180	1319	1970	171	18	1363	98	Fid Sensory 9	121	1114		200	÷.	
3	32	Meph Polgar 5	1 7 9	2082	ě.	3	(4)	19.1	99	Saitek Ast/Conq/Cavl	121	61		350	8.	12
_	33	Meph Dall./Mon.Dall	178	2283	1956	169	19	1391	100	Nov Mentor16/Amigo	118	22	*			30
_	34 35	Nov S.Forte/Exp, 6C Meph Roma/Montreal	178 176	2371 2267			-	543		PC Programs			1			
	36	Meph Academy	175	2000	1887	161	31	505		1 C 1 Togrania						
_	37	Meph Modena	173	174	1924	160	22	1020	1	Chess Genius 2			2364	220	57	197
_	38	Meph Amsterdam	173	2373	6	-	۰	120	2	(486/50-66) CheasMachine 30Mhz	3	150	2326	216	36	480
_	19 10	Nov S.Forte/Exp . 6B Meph Mega 4	173 172	1343 2435	ă.					(King 2.0, aggressive)			2320	210	30	460
-	11	Fid Mach 2B/C 68000	172	2909					3	Mephisto Gideon Pro			2319	215	5 9	176
_	12	Saitek Gal-Ren D10	172	1209	1905	163	65	123		(486/60-66)	12	(4)				0.00
_	13	Fid Travelmaster	170	505					4	Chess Genius 1 (486/50-66)			2286	211	43	323
	14 15	Meph S.Mond2/MC4 Novag Ruby/Emerald	170 170	224 26					5	M-C Pro 486/50-66			2283	210	38	407
_	16	Meph MM4	169	2866	=	-		140	6	ChessMachine 30Mhz	4		2280	210	62	168
_	17	Saitek Travel Champ	169	45	#	=	Tall	077		(Schroeder 3.1)	14	=	0011	001	25	500
_	18 19	Nov S.Forte /Exp. 6A	168 166	1155 834	1867	159	24	877	7	ChessMachine 16Mhz (Schr. 512k ARM2)	6	520	2211	201	32	567
	i9 i0	Saitek Turbo King II Meph MonteCarlo	166	262	9)(6			120	8	ChessMachine 16Mhz	12	8	2199	200	38	367
1:	51	Saitek Gal. / Ren. C8	166	313	1876	160	19	1412	9	(King 512k ARM2)	4	150				
_	52	CXG Sphinx Galaxy	165	2049	1865	158	26	701	1,,	M Chess 1.1-1.71			2196	199	44	326
_	i3 i4	Conchess Ply. Vict. 5.5 Fid Mach 2A 68000	165 164	697 338	1903	164	30	550	10	(on 486/33) Socrates 3.0 (486/33)	2		2163	195	68	104
_	55	Saitek GK2000	163	112	=	=			12	Fritz 2 (486/33)	-	200	2153	194	44	263
1	6	Novag Expert 5/6	161	532			10	160	13	M Chess 1.1 - 1.71			2128	191	36	408
_	7	Fid Club 68000	161	1459	8		4	100	1,4	(on 386/25-33)	14		2086	186	53	174
_	58 59	Novag Jade / Zircon Novag Forte B	161 159	18 1917		4			14	Hiarcs Master 1.0 (486/33)	14	121	2080	100	33	174
	50	Meph Rebell	159	2121	2.	15	9	44	15	Rex Chess 2.3			2029	179	65	126
1	51	Fid Avant Garde 5	159	1721	ii.	100	Ξ			(on 386/25-33)	Tk.	727				
_	52	Fid Par E./Des. 2100	158	2538	2 2	- 1	9	(a)	16	Fritz 1.0 486/33 Zarkov 2.5 386/25-33			2022 2018	178 177	63 56	128 168
_	i3 i4	Saitek Stratos /Corona Novag Forte A	158 157	3053 2202	8	C.			18	Fritz 1.0 (386/25-33)	1		2008	176	66	113
-	i5	Meph S.Mondial	157	1420	±.	2	3	-	19	Complete Chess	15	174	2003	175	62	133
1	66	Conchess Plymate 5.5	157	2169	#:	H	3	120		System (486/33)	=	*				100
1	57	Saitek Simultano	157	364	<u></u>	19	2:	37	20	Rex Chess 2.3			1928	166	53	174
L	- 12															