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March 10, 2005

Several "Wanted" numbers were factored on Page 96. From the wanted lists issued with Page 95 in November, 2004, NFSNET″ factored the "Most Wanted" numbers 5,304+ and 2,689+, both by the Special Number Field Sieve. J. Franke factored the "Most Wanted" number 7,239+, also by the SNFS. Bob Silverman started and Richard Wackerbarth finished the factorization of 2,667+ by the SNFS. Bruce Dodson factored 10,233− by the Elliptic Curve Method.

Bruce Dodson factored the "More Wanted" number 7,253+ by ECM. NFSNET″ factored 2,716+, 5,307− and 5,307+, all by the Special Number Field Sieve. Jes Hansen factored 3,437+ by SNFS and Walter Misar factored 2,709+ by ECM.

Five "Smaller-but-Needed" number were factored on Page 96, all by the General Number Field Sieve. Sean Irvine factored 2,1025−, 6,269+ and 7,637L. Paul Leyland and Don Leclair factored 11,221− and the group GGNFS factored 5,355+.

I will consult with J. L. Selfridge and issue new wanted lists when Page 97 is filled.

CWI means Peter Montgomery, Herman te Riele and Willemien Ekkelkamp at the Centrum voor Wiskunde en Informatica in Amsterdam. ECMNET means Paul Zimmermann, Alex Kruppa, Torbjörn Granlund, Michel Quercia, Witold Grabysz, Vilmar Trevisan and many helpers who use the GMP-ECM program of Kruppa and Zimmermann. NFSNET″ is a group of factorers lead by Jeff Gilchrist, Don Leclair, Paul Leyland and Richard Wackerbarth and with contributions from many volunteer workers. See their URL http://www.nfsnet.org . GGNFS is another NFS group, created by Chris Monico. See their URL www.math.ttu.edu/~cmonico/software/ggnfs/ .

Recall that a champion is one of the best two records in its class. The factorization of 12,597M gave a new champion (second place) for size (P102) of the penultimate prime factor. Bruce Dodson set a new record for size of prime factor found by the Elliptic Curve Method when he found a P59 factor of 10,233−.

The first holes done on Page 96 are in # 5080, # 5085 # 5094, # 5095, # 5096, # 5099, # 5112, # 5113, # 5116 and # 5120. The second holes done on Page 96 are in # 5079 and # 5081. The third holes done on Page 96 are in # 5082, # 5083 and # 5111. No fourth or fifth hole was done on Page 96.

The smallest new factor reported on Page 96 has 41 digits. See # 5086. The largest number factored on Page 96 has 262 digits. See # 5103.

The factorization of the C110 of 5,745M in # 5075 produced these two moderately close prime factors.
$$9339881975422965769035311954726327173904910651625492511$$
$$9477522926217363313322647110841912080433336760850824281$$

See the URL http://www.prothsearch.net/fermat.html for Wilfrid Keller's list of all known Fermat factors.

See the URL http://www.utm.edu/research/primes/largest.html for Chris Caldwell's list of all of the largest known Mersenne primes. The largest known Mersenne prime, the forty-second one, is $2^{25964951} - 1$.

See the URL http://www.cerias.purdue.edu/homes/ssw/cun/index.html for the online Cunningham book. The full text is available at the AMS web site: http://www.ams.org/online_bks/conm22 .

If your address is wrong, please tell me.

Keep the factors coming!

Sam Wagstaff