ANNUAL REPORT OF THE
CENTRAL BUREAU FOR ASTRONOMICAL TELEGRAMS

1995

The number of *IAU Circulars* issued again dropped during 1995, to a total of 159, the least for any year since 1986. As noted in last year's report, the recent decline is principally due to the transfer of all the material on unusual minor planets, as well as some of the material on comets (and including the transneptunian objects that have been found during the past few years) to the series of *Minor Planet Electronic Circulars*, issued by the Minor Planet Center. Another reason is the increased activity of the electronic exploders that relay much of the routine information on supernovae, novae and variable stars generally. A third reason is the introduction in 1995 of a new comet-designation system, a significant feature of which is that periodic comets no longer receive new designations at all of their returns—and thus that all the corresponding recovery information, often quite routine, no longer needs to appear on the *IAU Circulars*.

As was also noted in last year's report, the electronic exploders are also sometimes used to relay reported claims of discoveries of new objects. While this can be useful from the point of view of securing rapid confirmation, there is the danger that too many erroneous or incomplete claims will cause the effort on real objects to be reduced. There is also a chance that credit for a real discovery may be incorrectly given.

Six discoveries of comets were given designations in 1995. C/1995 O1 (Hale-Bopp) was of tenth magnitude but still well beyond the orbit of Jupiter and thus promised to be a bright and well-observed object near perihelion in 1997. Another was a rediscovery of a comet observed in 1846 but for which it had not been possible to give a reliable prediction. Despite the change in the system, designations were also given to as many as six comet recoveries, but these were comets making their critical first returns. Four bright galactic novae were discovered, as was one in the Large Magellanic Cloud. And 1995 brought the discoveries of 56 extragalactic supernovae, after 1992 and 1991 the third largest number in a calendar year; about one-third of the supernovae were found in automated deep searches, although half-a-dozen were bright enough to be discovered by amateur astronomers. Other items of particular interest on the *IAU Circulars* in 1995 were the possible discovery of new satellites of Saturn, a short-lived display of the α Monocerotid meteors, and the appearance of two transient x-ray pulsars in the general direction of the Galactic Center.

At the start of the year there were 527 subscribers to the printed *IAU Circulars* and 368 to the electronic version and Computer Service generally. The first number continues to decline, but not as rapidly as the second number increases, and at the end of the year the numbers were 455 and 453, respectively, this cross-over occurring much as had been predicted in the the 1994 report.

Thanks to the efforts of Gareth V. Williams, a homepage for the Central Telegram Bureau was initiated in the World Wide Web in April. The URL is `http://cfa-www.harvard.edu/ /cfa/ps/cbat.html`. Numerous improvements and additions were made during the course of the year. The WWW can be used as an entry into the Computer Service, although the plans to introduce a special new "Web Computer Service" have continually been thwarted by a limit of only 200 on the number of acceptable passwords. Unfortunately, it continues to be necessary to make a charge for the Bureau's services, but users should agree that the $6.00 monthly charge that covers *both* the Computer Service and the e-mail delivery (as well as some of the Minor Planet Center's services) is a real bargain. Without this support the staff of the Bureau would have to be significantly reduced, and it would simply not be possible to disseminate information as rapidly and reliably as is done at present, seven days a week. Pirating of the electronic *Circulars* still occurs. It needs to be emphasized that the *Circulars* are copyright. This means that illicit copying and redistribution of the *form* of the *Circulars* is forbidden. The *information* on the *Circulars* can, of course, be used, but those who simply republish that information without crediting the source are guilty of plagiarism. Some free information *is* in fact provided in the WWW homepage. This information includes, in particular, low-precision ephemerides for new and other bright comets. Also freely available are copies of the *IAU Circulars* more than a year old—including a version in typeset form that can be secured on a computer screen.

Most of the *IAU Circulars* during 1995 were prepared by Bureau Associate Director Daniel W. E. Green, the remainder by the undersigned. Responsibility for the administrative work of the Bureau has been shared by Donna Thompson and Muazzez Lohmiller.

Brian G. Marsden
Director of the Bureau