COMMISSION 6: ASTRONOMICAL TELEGRAMS¹

(TELEGRAMMES ASTRONOMIQUES)

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1. Introduction

As is evident from Director Dan Green's detailed report below, the Central Bureau for Astronomical Telegrams (CBAT) has functioned most reliably and efficiently during the 1999-2002 triennium. Given the unreliability of much of what seems to count as "information" these days in the Internet, the extra effort to ensure the reliability of the IAU Circulars (particularly when one considers the speed with which the information is often needed) is clearly very desirable, and Green's dedication is to be commended. Although the CBAT has operated basically as a "one-man show", others (including the undersigned) have helped out in the preparation of a few of the Circulars when the Director was unavailable. In this connection, I note with some concern that the post of CBAT Associate (or Assistant) Director is currently vacant, and I very much hope that an appropriate candidate can be selected and appointed in the near future.

B. G. Marsden President of the Commission

2. Report of the Central Bureau for Astronomical Telegrams

There were 717 IAU Circulars issued during the 1999-2002 triennium:

Dates	Circulars
1999 July-Dec.	Nos. 7213-7340
2000 JanJune	Nos. 7341-7445
2000 July-Dec.	Nos. 7446-7553
2001 JanJune	Nos. 7554-7654
2001 July-Dec.	Nos. 7655-7782
2002 JanJune	Nos. 7783-7929

Subscribers may receive the *Circulars* in printed and/or electronic form, the latter being available by e-mail or by logging in to the Computer Service, either directly on the Bureau's computers or via the World Wide Web. Since 1997, the *Circulars* have been made freely available at the CBAT website, but following complaints by paying subscribers, the general delay in posting for non-subscribers is now some 2-3 weeks.

¹Commission of the Executive Committee.

The number of subscriptions to the printed Circulars was 199 at the end of the triennium, down from 287 at the beginning. The number of subscribers to the joint Computer Service of the CBAT and the Minor Planet Center (MPC) is also down from the previous triennium, now to around 500. After experiencing an unfortunate downward circulation of paid subscribers to, first, the printed Circulars and then also to the electronic version, as a result of the public's gaining wide access to the Internet in the mid-1990s (and the general expectation that all electronic information should be free), the number of paid subscriptions for both forms of the Circulars appears now to be stabilizing.

Supernovae and comets have continued to dominate the activities of the Bureau, with the announcement during the triennium of the designation of 703 supernovae and 512 comets. Some 77 percent of the comets were found on SOHO spacecraft images of the near-sun region, leaving 120 ground-based comet discoveries—twice the number discovered during the previous triennium. This was due to the increased number of discoveries made by the near-earth-object (NEO) surveys (most prolifically by LINEAR and NEAT). More and more comet discoveries from NEO surveys are first reported as objects of asteroidal appearance. They are posted on the MPC's NEO Confirmation webpage because of their unusual motion. Follow-up observations may then show some of the objects to be of cometary appearance. In some instances this appearance may not be at all obvious, but the continuing observations allow progressively more refined orbit computations, and the MPC may therefore suspect particular objects to be comets, a suspicion that can eventually be confirmed by the detection of at least some weak cometary appearance. The working link between the CBAT and MPC is thus natural and highly useful.

An increasing number of supernovae are being announced from surveys by several groups searching at cosmological distances, and 213 of the supernovae announced were fainter than magnitude 21 (with 144 of these fainter than magnitude 23). Amateur astronomers in numerous countries are finding more supernovae during dedicated CCD surveys, and amateurs still dominate in finding Galactic novae. Their help with follow-up observations (astrometry, photometry) of new comets, novae and supernovae is also appreciated by the CBAT.

Since the IAU Circulars are in fact refereed (to a greater extent than many contributors realize), the CBAT benefits from regular consultation with members of Commission 6 in their various areas of astronomical expertise. Experts from outside Commission 6 are also sometimes consulted. In particular, the American Association of Variable Star Observers is often consulted with regard to novae and unusual variable stars, while N. N. Samus (who maintains in Moscow the IAU's General Catalogue of Variable Stars) has provided excellent cooperation with regard to providing the official designations for novae and other new variable stars, so they can quickly get into the astronomical literature via the IAU Circulars.

Other significant topics covered on IAU Circulars this past triennium include the near-storm displays of Leonid meteors each November and the announcement of several faint satellites of Uranus, Jupiter and Saturn, as well as of satellites or companions to various asteroids and transneptunian objects. Two long-lost comets were accidentally rediscovered by the LINEAR survey during the triennium—11D/Tempel-Swift, not seen since 1908, and P/1963 W1 (Anderson). The brightest nova of the triennium, V1494 Aql, reached visual magnitude 4 in early December 1999. The brightest supernova was SN 2001ig in NGC 7424, reaching visual magnitude ~ 12.3 in early January 2002.

The Edgar Wilson Award for amateur discoveries of comets was issued for the first time by the Smithsonian Astrophysical Observatory in consultation with the CBAT in mid-1999. As announced on *IAU Circulars*, there were then six recipients of the Award, while the two succeeding years involved three and two recipients, respectively.

D. W. E. Green Director of the Bureau