

## INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26

## (DOUBLE STARS)

## INFORMATION CIRCULAR No. 142 (OCTOBER 2000)

## NEW ORBITS

ADS $\alpha$ 2000 $\delta$	Name n	P a	T i	e $\omega$	$\Omega$ (2000) Last ob.	2000 2001	Author
00090-5400	HDO 181 1°6290	221 <sup>y</sup> 00 0''420	1978.71 154°1	0.406 25°3	161°6 1999.77	59°70''29 56.9 0.29	ALZNER & ARGYLE
819 00593-0040	A 1902 3.8848	92.67 0.346	1964.91 56.9	0.842 270.2	121.1 1996.696	198.5 0.340 199.7 0.341	DOCOBO & LING
1105 01233+5808	STF 115 AB 1.6604	216.82 0.863	1984.60 98.3	0.931 128.5	138.7 1999.729	172.7 0.175 170.7 0.191	DOCOBO & LING
1630 02039+4220	STT 38 BC 5.6542	63.67 0.302	2015.50 109.8	0.927 183.4	109.6 1999.726	104.8 0.465 104.4 0.450	DOCOBO & LING
3174 04233+1123	STF 535 0.3191	1128.00 2.040	2046.00 145.5	0.495 243.6	114.0 1999.8315	279.7 1.132 279.0 1.126	HARTKOPF & MASON
3614 05017+2050	HU 445 1.1854	303.69 0.592	1956.51 45.0	0.376 323.0	73.2 2000.017	121.1 0.420 122.6 0.421	SCARDIA
4929 06200+2826	BU 895 3.4719	103.69 0.282	2009.30 70.1	0.050 58.0	140.6 1999.8319	148.6 0.252 150.2 0.245	HARTKOPF & MASON
06384+2859	MCA 27 9.2545	38.90 0.159	1976.73 119.5	0.557 343.3	113.5 1999.8319	295.7 0.240 294.0 0.236	HARTKOPF & MASON
5956 07171-1202	A 2123 4.6566	77.31 0.684	1981.46 79.7	0.944 80.2	137.9 1999.1603	345.1 0.402 345.9 0.402	HARTKOPF & MASON
6825 08277-0425	A 550 8.5714	42.00 0.170	1952.70 108.0	0.026 24.0	170.4 1999.8666	127.6 0.072 109.0 0.058	HARTKOPF & MASON
08447-5443	I 10 2.5352	142.00 1.990	2000.80 105.2	0.470 188.0	163.6 1999.782	343.2 1.06 341.1 1.04	ALZNER & ARGYLE

**NEW ORBITS (continuation)**

<b>ADS</b> $\alpha$ 2000 $\delta$	<b>Name</b> <b>n</b>	<b>P</b> <b>a</b>	<b>T</b> <b>i</b>	<b>e</b> $\omega$	$\Omega$ (2000) <b>Last ob.</b>	<b>2000</b> <b>2001</b>	<b>Author</b>
7012 08487+0057	A 2552 4.3700	82.38 0.239	1968.93 128.4	0.232 166.0	34.7 1996.8665	64.8 0.240 62.3 0.247	HARTKOPF & MASON
7039 08507+1800	A 2473 3.0848	116.70 0.476	2015.30 68.0	0.890 89.1	108.5 1999.1578	66.9 0.277 68.5 0.273	HARTKOPF & MASON
9089 14020+5713	A 1097 AB 1.6021	224.70 0.409	1920.69 49.7	0.105 45.7	60.1 1997.330	241.1 0.437 242.0 0.438	SCARDIA
16450+2928	COU 490 7.0876	50.79 0.169	2013.10 136.1	0.672 269.9	104.1 1995.442	339.8 0.183 336.5 0.179	MANTE
10276 16566+5711	A 1143 4.0816	88.20 0.290	1949.80 136.4	0.632 39.2	101.7 1997.4004	244.3 0.404 243.2 0.399	HARTKOPF & MASON
10341 17066+0039	BU 823 0.6767	532.00 1.600	1954.70 37.6	0.417 16.5	66.2 1998.5940	152.2 0.919 153.6 0.925	HARTKOPF & MASON
11080 18075+1940	STT 524 0.5247	686.00 0.584	1946.30 129.7	0.672 57.8	24.2 1997.65	213.7 0.393 213.2 0.399	HARTKOPF & MASON
11530 18386+1632	HO 87 3.0362	118.57 0.310	1972.73 34.2	0.620 269.0	21.8 1997.682	71.2 0.348 72.8 0.352	HARTKOPF & MASON
21000+4004	KUI 103 12.2034	29.50 0.589	2007.66 0.1	0.742 130.5	132.1 1995.850	104.2 0.854 108.4 0.798	MANTE
21424+4105	KUI 108 13.5900	26.49 0.153	1974.72 142.4	0.333 176.1	12.3 1997.5232	223.8 0.099 200.2 0.102	HARTKOPF & MASON
16819 23322+0705	HU 298 11.7149	30.73 0.173	1987.47 31.0	0.263 57.0	126.8 1997.8293	339.3 0.203 346.3 0.202	HARTKOPF & MASON

**Report of IAU Commission 26  
Business Meeting Manchester, England,  
2000 August 14**

President: C. Scarfe (Canada)

Vice-President: W. Hartkopf (U.S.A.)

Organizing Committee: T. Armstrong (U.S.A.) - continuing  
F. Fekel (U.S.A.) - new  
P. Lampens (Belgium) - new  
J. Ling (Spain) - new  
R. Mathieu (U.S.A.) - continuing  
M. Valtonen (Finland) - continuing

Past-president: H. Zinnecker (Germany)

Despite the fact that more than half the commission's members voted in the recent election of vice-president Hartkopf and the new OC members listed above, and despite the significance of several agenda items, the meeting was poorly attended, with only nine members present, the same as at the previous meeting, in Kyoto. This report is based on notes taken by W. Hartkopf and the author, the latter of whom takes full responsibility for any inaccuracy.

The deaths of three members, C. Worley, P. Muller and C. Jaschek were acknowledged with a moment of silence. L. Loden's retirement and resignation from the commission was noted.

The commission has added twelve new members, as follows.

W. Chen (Taiwan)	B. Reipurth (U.S.A.)
C. Clarke (U.K.)	R. Sagar (India)
A. Ghez (U.S.A.)	M. Simon (U.S.A.)
P. Kroupa (Germany)	C. Terquem (France)
O. Malkov (Russia)	A. Tarasov (Ukraine)
B. Mason (U.S.A.)	L. Vaz (Brazil)

(Mason has been a consultant for the past three years, but has now joined the I.A.U. and becomes a full member of the commission.) Some discussion followed about how one might connect amateur double-star experts with the commission - the names of A. Alzner (Germany) and R. Tanguay (U.S.A.) were mentioned specifically - but no conclusion was reached. (It appears that I.A.U. rules prohibit their appointment as consultants.)

Zinnecker presented and briefly discussed the triennial report for the Transactions. He also reported on Symposium 200, the highly successful meeting in Potsdam on Young Binary Stars, for which our commission was the primary sponsor. We also supported Colloquium 170, on Precise Stellar Radial Velocities, held in Victoria in 1998, and a Symposium on Extragalactic Star Clusters, to be held next year in Chile. Finally, we were among the supporting commissions for two Joint Discussions at this year's General

Assembly, JD 5 on Mixing and Diffusion in Stars and JD 13 on Hipparcos and the Luminosity Calibration of the Nearer Stars, as well as a multi-commission meeting on the nomenclature of companions to stars.

Hartkopf reported briefly on the commission's website, which has been moved from Atlanta to Washington. He encouraged members to visit it and welcomed suggestions for matters to be included on the site.

Zinnecker presented a report from J. Docobo on the Information Circulars. It was felt that they should be linked to ADS or Simbad, and that future distribution should be done electronically as much as possible to reduce costs. The possibility of including spectroscopic orbits was also raised.

Scarfe reported on the multi-commission meeting on nomenclature. With the advent of planet discoveries, a further level of complexity has been added to that already engendered by the discoveries of binaries by observations at wavelengths other than optical. The potential discovery of many more from space missions lends urgency to the task of finding a nomenclature scheme that encompasses those new discoveries and techniques. In the end it was resolved to let the WDS group tackle the problem over the next three years, with the support of our commission and others with a stake in the outcome.

Mason reported on the current status of the WDS, including new data sources to be included, and Hartkopf discussed the new orbit catalog, which is now nearly complete. It was suggested that a list of calibration objects be posted on the web, and Hartkopf agreed to post a list of "Grade 1" objects with expanded ephemerides. An email message from Docobo stated that his group is also preparing an orbit catalog.

Possible future meetings were discussed. Topics included a Herschel bicentenary, multiple stars, complementary techniques (a sequel to the Atlanta Colloquium), interaction of binaries with their environments, binaries as distance indicators, and mass determination at the bottom of the main sequence. Possible sites included Mexico, Russia, the United States and the next General Assembly in Australia. Members wishing to comment on these ideas, or add their own, are invited to contact Scarfe at scarfe@uvic.ca or by mail.

A very brief discussion of new instrument developments ensued. We really needed more time to discuss the variety of new instruments, both ground-based and in space, which should lead to rapid growth of double star astronomy in the next few years. An extra session for such a discussion is being considered for the next General Assembly, since several new instruments will be in operation by then.

Group photos were then taken of all business meeting participants, and the meeting adjourned.

Colin Scarfe  
President Commission 26

It is with great regret that I have to inform you of the death, in Washington, at the age of 93, of Kaj Aa. Strand, who served as president of our commission from 1964 to 1967. He was born in Denmark in 1907, and emigrated to the United States in 1938. After serving in World War II, he spent several years at Yerkes Observatory and Northwestern University, before joining the U.S. Naval Observatory in 1958. His tenure as Scientific Director there from 1963 until his retirement in 1977 saw the observatory flourish in all areas of astrometry, thanks to the superb astrometric telescope in Flagstaff for whose design and construction he was primarily responsible, and which now justly bears his name. I have written to his widow to express sympathy on behalf of the commission. A full obituary has been submitted by his colleague Steven Dick to the Washington Post.

Colin Scarfe  
President Commission 26

### **ANNOUNCEMENT**

The database SIDONie (Site Informatique des etoiles DOubles de Nice) is now available on the Web at the adress <http://sidonie.obs-nice.fr> SIDONie recovers all the measurements of doubles stars discovered by Paul Couteau and Paul Muller as well as measurements made on visual couples north of -10 declination with separations less than 1 arcsecond or which exhibit obvious orbital motion. The data base was conceived to allow research on a specific objet (measurements, orbits, references) or statical research to help the preparation of an observing program. This data base will be updated by contribution of new data coming from published observations and orbits.

D. Bonneau  
Scientific manager of Centre des Etoiles Doubles.  
Observatoire de la Côte d'Azur.

### **ANNOUNCEMENT FROM THE IC EDITORS**

Following the suggestion of the current IAU Commission 26 President, Dr. Colin Scarfe, beginning with No.143 (February, 2001) the Information Circular will normally be delivered only by e-mail. To those institutions and people who would like to receive a hard copy, it will be sent only upon their request to the Editors.

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The deadline for contributions to Information Circular No. 143 is:

february 15th 2001

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