



TRANSACTIONS ON PLASMA SCIENCE

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Editor

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ANNUAL REPORT FOR 2004

This report follows the formats used in prior years. First, there is a summary and discussion of major events and journal statistics. The detailed statistical portion follows, giving the status and accomplishments of TPS during this year. The report ends with an estimated budget for 2005.

HIGHLIGHTS

- Print delay problems experienced in previous years were mainly resolved by year's end – three out of six issues were published on schedule
- TPS is on the World Wide Web – the latest Table of Contents on IEEE's Web site, full text search & PDF (1988-2004) on IEEE's Xplore & TPS's own web site at <http://www.ieeetps.org> – “rapid posting” of upcoming MSs seems to be on track
- IEEE's Manuscript Central system is now being successfully used for new and revised MS submissions, and for review of these MSs by the Editor and all Special Issue Guest Editors
- Electronic publishing has definitely arrived with 100% of TPS's final MSs submitted in electronic form
- TPS pages have increased with 2295 pages and a record eight Special Issues this year vs. 1476 pages and four Special Issues last year (even numbered years are generally “large print” years)
- Months-to-publication decreased substantially: 8.5 months (2004) vs. 10.1 months (2003)
- Overall paper acceptance rate this year is 74% (2004) compared with last year's 68% (2003)
- Regular paper acceptance rate is now at 56% (2004) up a bit from 54% (2003) last year
- Regular MSs are arriving at a rate of 10.9/month up somewhat from the 9.4/month rate of last year
- Page charge collection rate is up slightly this year at 63% vs. 59% last year
- As a result of the IEEE TAB Publications Committee's 5 year review, every aspect of the operations of the Transactions on Plasma Science has been re-examined and a variety of recommendations for change have been made by an ad hoc committee composed of the Editor, Associate Editors, and EXCOM members

DISCUSSION

This is the 13th full year in which TPS has provided authors with the option to submit finished manuscripts in electronic form. We have received MSs via floppy disks, ZIP disks, CDs and electronic mail. This year's statistics show, as we had achieved in the last four years as well, a remarkable 100% (293 out of 293) of the published MSs were submitted in electronic form. In

addition to our Tables of Contents, search capabilities, and full PDF MSs available via IEEE's Xplore (<http://ieeexplore.ieee.org>), we also updated TPS's web site, launched in early 2000 (check it out at: <http://www.ieeetps.org>), by adding upcoming Special Issue announcements with links to their respective web pages, historical data on Special Issues back to 1994, a link to the current IEEE Copyright form, and our Page Charge Questionnaire.

During the period covered by this report, TPS has experienced an increase in pages published (2295 pages for 2004 versus 1476 pages for 2003). This number of pages is more than 5% below that budgeted. The increase was due to a record number – eight Special Issues published this year compared to the four published last year.

A significant decrease in months to publication was noted this year (8.5 months for 2004 versus 10.1 months for 2003). To address the matter of timely publication, I continue to send deadline reminders and summaries of the Special Issue manuscript status, to all the Guest Editors during the course of the review process for all Special Issues. I continue to use FAX, Federal Express, and electronic mail to speed along the process as well.

Beginning in October 2002, the Transactions began using IEEE's Manuscript Central for MS submission and review. An Editorial, formally launching Manuscript Central, was published in the April 2003 TPS issue. The current experience is that the system is fairly easy to use for authors, reviewers, Guest Editors, and the Editor. The hope that Manuscript Central would help improve the speed of the review process has been fulfilled, at least for 2004. We will continue to monitor this situation, and try to find additional ways to improve the speed of publication statistics.

This year, we published eight excellent Special Issues on:
Feb '04 -- Plenary & Invited Papers from ICOPS 2003 (Guest Editor: Sang Hee Hong);
Feb '04 -- Pseudospark Physics and Applications (Co-Guest Editors: Martin Gundersen & Werner Hartmann);
Apr '04 -- Selected Contributed Oral Papers from ICOPS-2003 (Co-Guest Editors Ian Brown, J.J. Choi, Paul K. Chu, H. Fujiyama, Y.S. Hwang, Mark Kushner, Wes Lawson, Frank Hegeler, S. Sudo, Han-Sup Uhm [Lead Guest Editor]);
Apr '04 -- Physics of Dusty Plasmas (Co-Guest Editors: Alexei Ivlev, André Melzer, Wayne A. Scales & Edward Thomas, Jr.);
Jun '04 -- High Power Microwave Generation (Co-Guest Editors: David Abe & Monica Blank)
Aug '04 -- Space Weather Dynamics and Effects on Technology (Co-Guest Editors: Ioannis A. Daglis, Daniel N. Baker & Konstantinos Koutroumbas);
Aug '04 -- Nonthermal Medical/Biological Treatments Using Ionized Gases and Electromagnetic Fields (Co-Guest Editors: Ravindra P. Joshi, Walter R. Rogers & Andrei Pakhomov);
Oct '04 -- Pulsed Power Science & Technology (Co-Guest Editors: James Dickens, John Mankowski, & Jane Lehr).

There were 225 papers published in this year's Special Issues representing 77% of the papers published this year. All the Guest Editors are to be commended on their hard work in assembling these fine Special Issues. The plasma science community as a whole definitely benefits from such Issues, bringing together cutting edge research in a single volume. The hope is that by Guest Editors using Manuscript Central, their jobs will be easier, and the finished Special Issues will be published in a more timely fashion.

Keeping TPS running smoothly is also due to the efforts of dedicated staff at IEEE Headquarters in Piscataway, New Jersey. Managing Editor Jeff Cichocki and Associate Editors Meredith Lockard and Cynthia Balejsik are working closely with Editor and Guest Editors, authors, and vendors to assure on-time publication status for all our TPS issues.

I continue to request input from readers, authors, Associate Editors and friends of TPS in the following areas: Special Issue subjects, Guest Editor nominations, Associate Editor nominations,

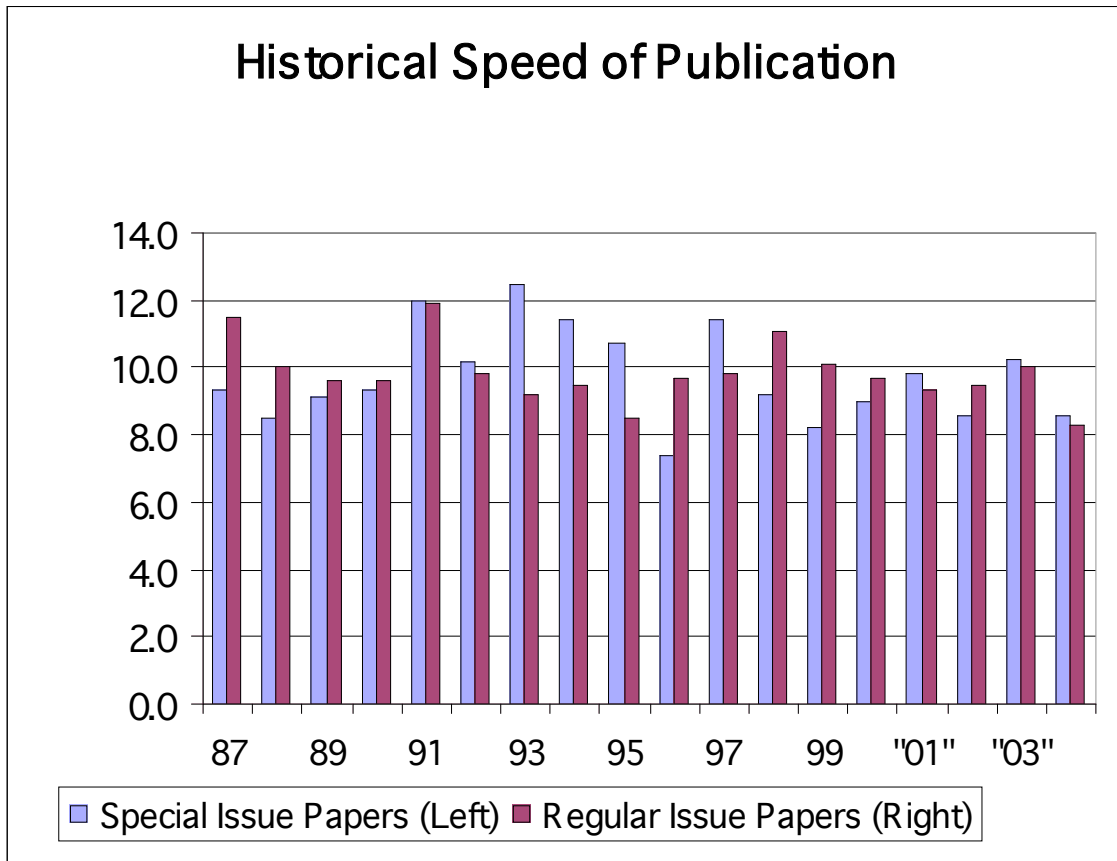
review paper topics and authors, and contributed MSs. It is through the efforts of the many members of the Plasma Science Community that the TPS will continue to improve in quality, timeliness and financial viability to meet the changing and challenging needs of our profession.

JOURNAL STATISTICS

I. Speed of Publication

- defined as the number of months elapsed from first submission of MS until the date listed on the TPS issue:

8.30 months (Reg Issue Papers), 8.56 months (Sp Issue Papers), 8.50 months (all papers)



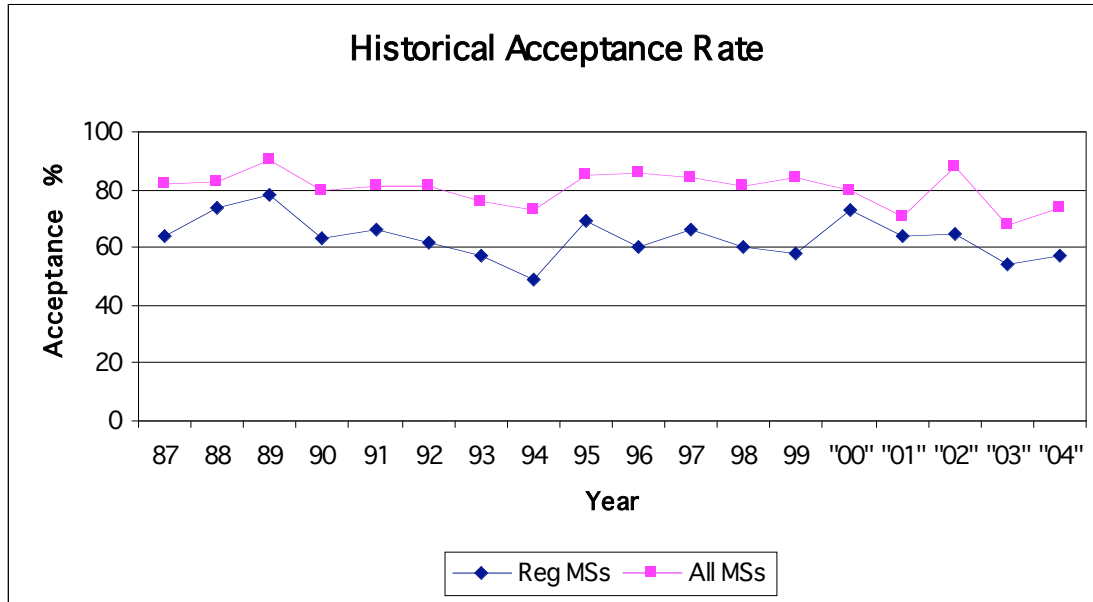
II. Paper Acceptance Statistics

(10/1/03 to 9/30/04 plus all Special Issue MSs published in 2004) - Sample size 454 papers

Accepted - 316, Rejected - 110, Pending - 12, Withdrawn - 16, Not Germane - 0

Acceptance Percentage = 57% for Regular Issue Papers

Acceptance Percentage = 74% for all papers

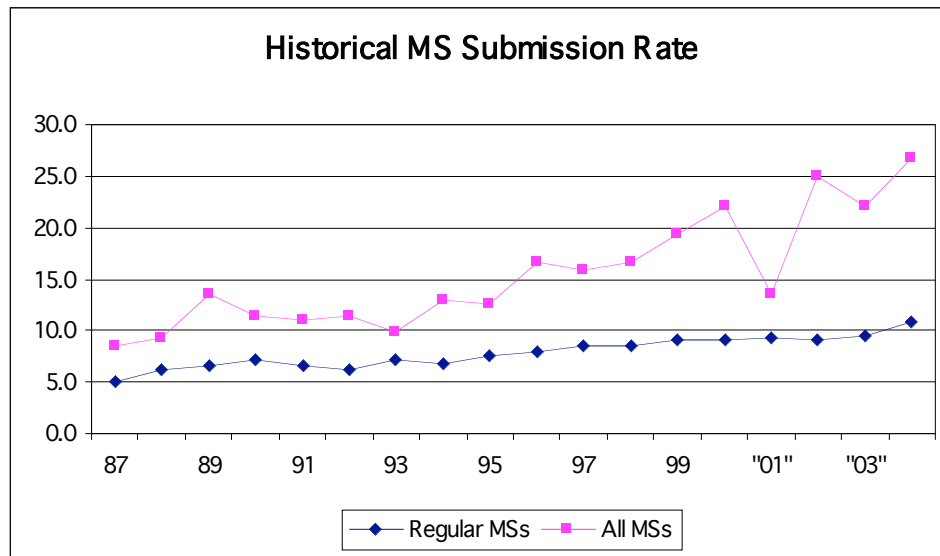


III. Publication Statistics # = Special Issue

Issue	Papers	incl covers Tot pgs	Paid pgs	Ed pgs/TOC/ann's	Fill pgs	Index	MSs electr
Feb '04#	41	331	226	7	4	24	41
Apr '04#	74	493	365	13	5		74
Jun '04#	65	577	345	7	4		65
Aug '04#	44	363	208	9	1		44
Oct '04#	54	401	257	6	0		54
Dec '04	15	130	51	0	2	40	15
TOTALS	293	2295	1452	42	16	64	293
Totals '04	293	2295	1452	42	16	64	293
Totals '03	176	1476	869	30	9	48	176
Totals '02	344	2104	1499	8	4	0	344
Totals '01	144	973	623	18	2	69	144
Totals	286	2287	1601	40	12	0	285

'00 Totals	263	1648	868	25	12	34	263
'99 Totals	204	1720	1169	8	5	20	204
'98 Totals	189	1480	1001	13	2		172
'97 Totals	216	1457	867	17	4		202
'96 Totals	133	1064	596	19	6		127

IV. Submission of MSs (MSs per month versus Year)



V. Scheduled Special Topic Issues

2005 ...

- Feb 2005 *Special Issue on Plenary and Invited papers from ICOPS-2004* -- Co-Guest Editors Carl Ekdahl, Jr. (Los Alamos National Laboratory, Los Alamos NM), and Patrick Pedrow (Washington State University, Pullman, WA USA)
- Apr 2005 *Special Issue of Images in Plasma Science* – Co-Guest Editors: Mark Kushner (Iowa State University, Ames, IA USA) and Greg Hebner (Sandia National Laboratories, Albuquerque NM USA)
- Apr 2005 *Special Issue of Selected Oral Contributed Papers from ICOPS 2004* -- Co-Guest Editors: Paul K. Chu (University of Hong Kong, Hong Kong), Simon Cooke (Naval Research Laboratory, Washington DC USA), Christine A. Coverdale (Sandia National Laboratories, Albuquerque NM USA), Adrian W. Cross (University of Strathclyde, Glasgow UK), Trevor Moeller (University of Tennessee Space Institute, Tullahoma TN USA)
- Aug 2005 *Special Issue of Selected Papers from the Power Modulator Conference (2004)* – Co-Guest Editors: Hulya Kirkici (Auburn University, Auburn University AL USA), Andreas Neuber (Texas Tech University, Lubbock, TX USA) and Ryan Umstatted (Naval Postgraduate School, Monterey CA USA)
- Oct 2005 *Special Issue on Vacuum Discharge Plasmas* – Co-Guest Editors: Ken Struve (Sandia National Laboratories, Albuquerque NM USA) and Sergei M. Shkol'nik (Ioffe Physical-Technical Institute, Russian Academy of Sciences, St. Petersburg, Russia)
- Dec 2005 *Special Issue on Plasma Combustion* – Co-Guest Editors: Louis Rosocha (Los Alamos National Laboratory, Los Alamos NM) and Igor Matveev (Applied Plasma Technologies, Falls Church VA USA)
- Dec 2005 *All Invited paper Special Issue on Ion Sources* – Guest Editor: Marthe Bacal (Ecole Polytechnique, Palaiseau, France)

2006 ...

- Feb 2006 *Special Issue on Plenary and Invited papers from ICOPS-2005* -- Guest Editor: TBD
- Feb 2006 *Special Issue on Plasma Display Panels* – Co-Guest Editors: Jean-Pierre Boeuf (Université Paul Sabatier, Toulouse, France), Ki-Woong Whang (Seoul National University, Seoul, South Korea) & Heiju Uchiike (Saga University, Saga, Japan)
- Apr 2006 (tentative) *Special Issue on the Physics of Dusty Plasmas* – Guest Editor: TBD
- Jun 2006 *Special Issue on High Power Microwave Generation* – Co-Guest Editors: Wesley Lawson (University of Maryland, College Park, MD USA), Chiping Chen (Massachusetts Institute of Technology, Cambridge MA USA), and Daryl W. Sprehn (Stanford University - SLAC, Stanford, CA USA)
- Jun 2006 *Special Issue on Nonlocal, Collisionless Electron Transport in Plasmas* – Co-Guest Editors: Igor Kaganovich (Princeton Plasma Physics Laboratory, Princeton NJ USA), Yevgeny Raitses (Princeton Plasma Physics Laboratory, Princeton NJ USA), and Stewart Zweben (Princeton Plasma Physics Laboratory, Princeton NJ USA)
- Aug 2006 *Special Issue on Plasma-Based Surface Modification and Treatment Technologies* – Co- Guest Editors: Paul Chu (City University of Hong Kong, Hong Kong, China) & Ken Yukimura (Doshisha University, Kyoto, Japan)
- Aug 2006 *Special Issue on Nonthermal Medical/Biological Treatments Using Ionized Gases and Electromagnetic Fields* – Guest Editors: Juergen Kolb (Old Dominion University, Norfolk VA USA) and others TBD
- Oct 2006 *Special Issue on Pulsed Power Science and Technology* – Co-Guest Editors: Jane Lehr (Sandia National Laboratories, Albuquerque NM USA), Mark Savage (Sandia National Laboratories, Albuquerque NM USA), and Bryan V. Oliver (ATK-Mission Research Corporation, Albuquerque NM USA)
- Dec 2006 *Special Issue on Space & Cosmic Plasmas* – Guest Editor: Anthony Peratt

VI. Transactions on Plasma Science - 2005 Budget

Page Budget Estimate (includes covers & index)

Feb	2005 (Special Issue)	542	pages
Apr	2005 (Special Issue)	338	pages
Jun	2005 (Special Issue)	238	pages
Aug	2005 (Special Issue)	288	pages
Oct	2005 (Special Issue)	388	pages
Dec	2005 (Special Issue)	482	pages
Total Page Budget 2005			2276 pages

Income & Expenses (See IEEE historical budget printout – attached)

2005 TPS Estimated Income	\$564.1K
2005 TPS Estimated Expenses	\$315.4K
2005 TPS Estimated Surplus (Loss)	\$248.7K



Respectfully Submitted

Steven J. Gitomer, Editor, IEEE TPS

Date: 23 March 2005

2005 IEEE S/C BUDGET
FOR THE PERIOD ENDING DECEMBER 31, 2005

BUSINESS UNIT - 0050 NUCLEAR AND PLASMA SCIENCES SOCIETY - DIVISION IV
 COST CENTER - 00281 TRANS. ON PLASMA SCIENCE

ACCOUNT NUMBER	PRIOR YEAR ACTUALS						2004 BUDGET	2005 BUDGET
	1998 ACTUALS	1999 ACTUALS	2000 ACTUALS	2001 ACTUALS	2002 ACTUALS	2003 ACTUALS		
S/C Fees Hard Copy	3018000000	13.0	9.5	10.9	7.5	12.7	13.1	24.1
S/C Fees Micro Fiche	3018100000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S/C Electronic	3018400000	0.0	0.0	0.0	0.0	0.6	1.2	2.8
S/C Package (Print & Electronic)	3018500000	0.0	0.0	0.0	0.0	0.6	1.3	3.4
Subscriptions - NM Individual	3202000000	72.0	72.6	74.3	83.8	112.1	94.6	68.5
Subscriptions - APP/ELMDL	3205000000	168.3	186.7	0.0	141.1	288.0	355.9	317.2
IEL		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Airfreight Charges Billed to Members	3251000000	6.8	0.2	2.0	4.3	1.4	1.5	1.5
Voluntary Page Charges	3310000000	54.7	60.9	32.3	63.3	38.3	69.2	69.2
Misc. Revenue	3869900000	0.0	0.0	0.0	0.0	0.0	0.8	0.0
Overlength Page Charges	3311000000	73.9	62.7	39.0	57.8	26.3	77.5	77.5
Total Income		388.7	392.6	158.5	357.8	480.0	615.1	564.1
2nd Class - Edit US	4201500000	5.0	4.3	4.7	1.9	2.4	1.6	2.0
2nd Class - Edit Non US	4202500000	7.4	8.2	13.9	6.5	13.7	8.8	11.2
Freight & Other	4205500000	5.3	2.0	2.7	1.1	2.0	1.5	1.9
Air Freight	4206500000	3.6	1.9	2.3	1.6	0.4	0.8	1.0
Text Paper	4553000000	15.1	13.8	18.4	11.1	18.0	7.2	10.1
Press Work Print	4581000000	18.0	12.0	29.7	18.6	61.4	20.6	29.0
Binding PrtEd	4582000000	4.4	2.5	3.2	2.1	5.0	2.1	3.0
Mailing PrtEd	4583000000	3.6	3.8	6.0	3.1	3.4	3.8	5.4
Total Printing Expense		62.4	48.5	80.9	46.0	106.3	46.4	63.5
Sal-Temp2	4006000000	0.0	0.0	0.0	12.2	15.9	14.7	15.0
Copyright Filing Fees	4144000000	0.0	0.0	0.2	0.1	0.1	0.0	0.1
Bad Debt Allowance	4146000000	(1.7)	0.0	0.0	1.1	(1.1)	0.0	0.0
Manuscript Central	45130PERRV	0.0	0.0	0.0	0.0	0.5	6.6	6.7
Express Carriers	4205000000	0.0	0.1	0.0	0.5	0.0	0.0	0.0
Camera Work-Print	4561000000	0.0	0.0	0.0	7.1	25.9	9.3	14.5
Editor Fee	4513000000	12.5	14.2	4.7	1.2	0.0	0.0	0.0
Editorial Headquarters	4514000000	0.0	(13.1)	0.0	0.0	0.0	0.0	0.0
Editorial Reimbursed Expense	4515000000	5.9	10.2	14.4	3.8	7.0	8.0	4.0
Composition	4521500000	67.8	79.4	82.9	29.5	69.2	28.6	65.1
Reprinting-PrtEd (Color Graphics Recovery)	4584000000	0.0	(13.3)	(2.3)	(11.8)	(50.1)	(13.0)	(13.3)
Pursvc - Voluntary Page Charges	5003000000	9.9	13.0	3.5	14.4	7.3	12.9	7.3
Pursvc - Overlength Page Charges	5002000000	6.3	5.1	2.3	3.2	2.2	5.5	5.5
Pursvc-Composition Electronic	50200GRAPH	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Pursvc-Editorial	5007000000	130.3	98.3	133.4	55.2	131.6	104.5	140.0
Pursvc-Indexing	5010000000	3.8	1.8	1.1	2.2	1.5	0.9	2.3
Pursvc-Composition	5020000000	0.0	0.0	0.0	0.0	0.0	2.9	0.0
Pursvc-Reprints	5025000000	0.0	0.0	0.0	0.0	0.0	5.4	0.0
Pursvc-Pub Admin	5024000000	8.4	8.4	4.7	10.1	6.1	8.3	18.8
Pursvc-Manuscript Central	5037500000	0.0	0.0	0.0	0.0	0.2	5.6	4.5
Pursvc-Subscription Handling	5032000000	6.0	6.0	6.0	6.0	4.9	3.6	2.9
Total Creation Expenses		249.2	210.1	250.9	134.8	221.2	203.9	347.5
Pursvc-OPERA	50370OPERA	3.1	2.0	0.0	0.0	0.0	0.0	0.0
Pursvc-XPLORE	50370XPLORE	0.0	0.0	0.0	0.0	0.0	0.0	9.4
Total Electronic Expenses		3.1	2.0	0.0	0.0	0.0	0.0	10.1
Microfiche	4542000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Misc. Expense	4999000000	3.6	0.0	1.0	2.5	1.6	0.0	4.0
Total Other Expense		3.6	0.0	1.0	2.5	1.6	0.0	4.0
Rmb Services-MDL	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-Itel	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-BEL	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-other	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-ASPP	60221APPIN	0.0	0.0	(183.9)	0.0	0.0	0.0	0.0
Total Reimbursed Services		0.0	0.0	(183.9)	0.0	0.0	0.0	0.0
Total Expense/PurSvc/Reimb Svc		318.3	260.6	148.9	183.3	329.1	250.3	315.4
Total Net		70.4	132.0	9.6	174.5	150.9	364.8	248.7