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THE SOCIETY OF RHEOLOGY EXECUTIVE COMMITTEE – 1999-2001

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73rd ANNUAL MEETING BETHESDA, MD OCTOBER 21-25, 2001

The Fall 2001 meeting of the Society of Rheology will be held at the Hyatt Regency Hotel in Bethesda, Maryland. The meeting organizers are:

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Visit The Society of Rheology on the web at
http://www.rheology.org/

MINUTES OF THE EXECUTIVE COMMITTEE MEETING
August 22, 2000

Gerry Fuller called the meeting to order at 7:30 p.m. in the Philippa Fawcett Room at Newnham College, Cambridge, England. Committee members attending were Susan Muller, Lisa Mondy, Monty Shaw, Jeffrey Giacomin, Gerry Fuller, Mort Denn, Ron Larson, and Bill Russel. Invited guests were Janis Bennett, Greg McKenna, Don Baird, Faith Morrison and Rakesh Gupta. The minutes of the previous meeting were read and approved. Susan Muller reported on proposals for future short courses. The Education Committee welcomes new proposals. Faith Morrison reports an increase in membership for 1999 of 3.4% to 1759. Don Baird reported on local arrangements for the meeting in Hilton Head, South Carolina (February 11-15, 2001). The cut-off date for preferred room rates at the Westin Resort is January 22, 2001, but earlier room registration is advised. The early registration deadline for both attendees and exhibitors is January 11, 2001. Greg McKenna reported on local arrangements for the meeting in Bethesda, Maryland (October 21-25, 2001). The meeting will be held at the Hyatt Regency Bethesda. For the Local Arrangements Chair Chris Macosko, Monty Shaw reported on the meeting in Minneapolis, Minnesota (October 13-17, 2002). Rakesh Gupta presented a proposal to host the October 2003 meeting in Pittsburgh, Pennsylvania. A motion was passed to hold the meeting in Pittsburgh, with Guy Berry, Lynn Walker and Rakesh Gupta serving as co-chairs of the Local Arrangements Committee. This coincides with the Semicentennial Anniversary of The Society of Rheology, which was founded in Pennsylvania. Greg McKenna presented a proposal to host the February 2005 meeting in Lubbock, Texas. Gerry Fuller, for Francis Gadalla-Maria, presented a proposal to host the February 2005 meeting in Charleston, South Carolina. Both proposals were well received, then tabled. Rakesh Gupta, Editor, reported on the Rheology Bulletin. New articles and advertisers are invited. Treasurer Monty Shaw submitted a Statement of Revenues and Expenses on The Society of Rheology and on the Journal of Rheology. A discussion ensued on revising membership dues. Further discussion ensued on members who, through their use of JOROL, may no longer want the print version. For webmaster Albert Co, Monty Shaw reported that preparations for electronic voting in Society elections are well underway. Editor Mort Denn reported that the Journal of Rheology is in good health. In other business, President Fuller formed an ad hoc committee to receive and review proposals to host the International Congress on Rheology in the United States in 2008. Following a brief executive session, the meeting was adjourned at 11:10 p.m.

The Executive Committee meets in Cambridge.

2000 JOURNAL OF RHEOLOGY PUBLICATION AWARD

The winners of the 2000 Journal of Rheology Publication Award are D.J. Pine, Y.T. Hu, P. Boltenhagen, and E. Matthys. The award is based on parts I and II of "Shear thickening in low-concentration solutions of wormlike micelles," and it will be presented at the Hilton Head meeting in February 2001. Congratulations!

73rd ANNUAL MEETING TO BE HELD IN BETHESDA, MD

The site of the meeting, to be held October 21-25, 2001, is the Hyatt Regency Hotel in Bethesda, MD. The hotel is just 2 miles from the Washington, DC border, near the National Institutes of Health. The hotel is situated directly above a stop on Washington's Metro subway system for convenient access to the Smithsonian Institution museums, the National Zoo, the White House, the Capitol, and the monuments around the National Mall. Admission is free to most of the federally operated locations, such as the Smithsonian Institution. There are also more than 100 restaurants within walking distance of the Hyatt Regency. October is peak tourist season in Washington, with an average high temperature of 69 °F and an average low temperature of 50 °F. For this reason, reservations at the Hyatt Regency should be made early; special room rates for the meeting are $149 for single occupancy and $169 for double occupancy.

The meeting location is convenient to all three of the airports that serve Washington, DC, with easy freeway access to Dulles International Airport (25 miles), Baltimore-Washington International (BWI) Airport (35 miles), and Reagan Washington National Airport (15 miles). Reagan National Airport can also be reached with ease via the Metro subway system, since the Hyatt Regency sits directly above the Bethesda stop on the Red Line. There is also rail service connecting the Metro system and BWI airport.

The meeting coincides with the Centennial of the National Institute of Standards and Technology (formerly the National Bureau of Standards), located 15 miles farther north in Gaithersburg, MD. Some connection between the meeting and Centennial events at NIST is planned. Additional information will be made available in the July Bulletin and on the Society web site.

TECHNICAL PROGRAM FOR BETHESDA

Authors should submit an abstract after March 15, 2001, but before **May 18, 2001** through the World Wide Web using the SoR abstract submission page at www.rheology.org. The planned symposia and the corresponding chairs are given below. Where the name of only one chair is mentioned, the other name will be announced later.

1. SIMPLE FLUIDS TO SUSPENSIONS: A Symposium in Honor of William R. Schowalter

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William Russel
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2. VISCOELASTICITY IN POLYM. SOLNS. & MELTS

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David Venerus
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3. QUANTIFYING MICROSTRUCTURE IN COMPLEX FLUIDS

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4. SOLID RHEOLOGY FROM GLASSES TO GELS

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Alan S. Wineman
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5. **TWO PHASE SYSTEMS: Emulsions, Blends and Suspensions**

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6. PHENOMENA NEAR SOLID BOUNDARIES

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7. FLOW INSTABILITIES

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8. PROBES OF LOCAL RHEOLOGY & STRUCTURE

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9. MOLECULAR LEVEL MODELING & THEORY

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10. POLYMERS WITH COMPLEX ARCHITECTURE

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11. GENERAL PAPERS

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RHEOLOGY SHORT COURSE

A short course will be offered on Saturday and Sunday, October 20-21, 2001 immediately preceding the Bethesda meeting. The course titled, "Conventional Experimental Methods Used in Polymer Melt Shear Rheology and Molecular Architectural Interpretations," will be taught by Dr. William H. Tuminello of the DuPont Company. Details will be forthcoming in the July Rheology Bulletin and on the Society web site.

Meeting Information
72nd Annual Meeting
Hilton Head Island, SC
February 11-15, 2001

Location

The 2000 Annual Meeting of the Society of Rheology will be held at the Westin Resort (Port Royal Plantation), Hilton Head Island, SC. Hilton Head Island is one of the most favored resort destinations in the world with a comfortable year-round climate and extraordinary recreational amenities. The island is bordered by 12 miles of white sandy beaches on one side and the intra-coastal waterway on the other. There are riding stables, nature preserves, miles of jogging and bike paths, and 30 golf courses to choose from. The hotel is situated directly on the ocean and has many amenities including a fitness center, outdoor and indoor pools, tennis courts, and 3 golf courses. The historic cities of Savannah, GA, Beaufort, SC, and Charleston, SC are nearby. The Island is known for its many fine restaurants.

Hotel Registration

Hotel reservations are to be made directly with the Westin Resort. The rate is $135 per room per night plus taxes and a $3 resort fee which includes free phone access, the use of the fitness center, and several other amenities. This rate is obtained by requesting the rate for the Society of Rheology Meeting. Reservations must be made by January 11, 2001 to guarantee this rate as any rooms not taken will be released to prevent the Society from bearing any penalties.

Phone: 843-681-4000 or 800-937-8461 Fax: 843-681-1087

Meeting Registration

The meeting registration form may be downloaded from the Society's web page at http://www.umche.maine.edu/sor/. The registration fee is $115 and may be paid by check made out to "Society of Rheology-Annual Meeting" or credit card (Master Card and Visa only)". Payments received after January 18, 2001 will incur a late fee. The registration fee will include the abstract booklet, three receptions, coffee breaks, and refreshments at the poster session. Banquet tickets will be $45 and can be purchased at the time of registration.

Registration at the meeting will take place in the Savannah Foyer from 3 to 6:30 PM Sunday, February 11. Registration for the duration of the meeting will take place from 8:00 AM to 12:00 PM and from 2:00 to 4:00 PM on February 12 and 13 and from 9:00 AM to 12:00PM on Wednesday February 14.

Transportation

Hilton Head is accessible from either Savannah, GA International Airport (45 minutes by car) or the Hilton Head Island Airport (5 minutes away). A number of major air carriers service Savannah while only commuters service Hilton Head. Shuttle service can be arranged through the hotel or directly by calling Low Country Adventures, Ltd.:

Phone: 800-845-5582 Fax: 843-681-6716

Receptions and Banquet

Sunday's reception will be held in the Archer room from 6:30 to 9:00 PM and will consist of heavy hors-d'oeuvres of sufficient quantity to make dinner reservations optional. Wine, beer, and soft drinks will be included, but mixed drinks will be a cash bar. On Monday the poster session will run from 6:00 to 8:00 PM and be held in the Savannah Foyer and will be accompanied by refreshments. This will overlap with the reception Monday night which will be held in the garden-courtyard area of the hotel starting at 7:00 PM (cash bar for mixed drinks). The winner of the poster session will be announced at the reception. It is recommended that dinner reservations be made following the reception. On Tuesday night a reception (open bar) will be held from 7:00 to 8:00 PM preceding the Bingham Award Banquet which will be held in the Archer Room starting at 8:00 PM. Refreshment breaks throughout the meeting will be held in the Barnwell Room where the exhibitors will be located.

Local Arrangements Chair

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BOOK REVIEW

SOFT AND FRAGILE MATTER: NONEQUILIBRIUM DYNAMICS, METASTABILITY AND FLOW

Edited by M. E. Cates and M. R. Evans
Institute of Physics Publishing, May 2000, 394 pages
Paperback, ISBN 0 7503 0724 2, $57 or 35 Sterling

The title of this book inspired thoughts of post party gray matter. It is an excellent book arriving at an appropriate time in a rapidly- developing area. The book addresses fundamental topics that cover a wide range of research areas. It results from the Fifty Third Scottish Universities Summer School in Physics in July 1999 and is the proceedings of that meeting. Unlike many texts of this type that suffer from being disjointed and being merely a compilation of chapters, this book has a coherence due to good editing and a focus on the fundamental unifying principles of the field. I found all the chapters to be of interest and believe them to be of relevance to the general rheology community. This is particularly so for those interested in the fundamental science behind the observed behavior in these fascinating systems. Each chapter is written with a straightforward introduction to the concepts and introduces the material in a readily accessible manner. Each of the chapters is self-contained and leads the reader from basic principles to a selection of the most recent and important developments in research in the area. The introductory sections are well written, and they clearly describe the physics associated with the phenomenon. The level is that of a graduate text which is suitable both as a reference text and for those wishing to obtain a general background in the field. The referencing of the chapters covers the areas well and includes colloids, polymers, surfactant phases, emulsions and granular media. The 15 lecturers are all recognized specialists in their field of discourse and this is apparent when reading the book.

The volume may be divided into three main sections as follows; the introductory chapter of "A day in the life of the hard-sphere suspension" followed by methodologies and phenomena of soft condensed matter (six chapters), modern concepts of non-equilibrium statistical physics (four chapters) and dynamics and metastability in colloidal and granular systems (four chapters). The list of chapters and authors is delineated as follows: "A day in the life of the hard sphere suspension" by Wilson Poon. This chapter introduces the book in a very readable manner discussing non-equilibrium physics and soft matter, hard sphere colloids, metastabiliy, non-equilibrium dynamics and flow and fragility.

Chapter 2 by David Pine covers "Light scattering and rheology of complex fluids driven far from equilibrium". Following an excellent introduction to light scattering is a discourse on light scattering in shear flow and diffusing wave spectroscopy. The topics of shear thickening in wormlike micellar solutions, yielding and rearrangements in glassy emulsions are discussed with reference to recent results.

Chapter 3 covers "Polymer physics; from basic concepts to modern developments" by Alexei Khoklov. This chapter introduces the concepts of polymer physics in a very accessible and clear manner taking the fundamental concepts through to polyelectrolytes and AB copolymers.

Chapter 4: "Rheology of linear and branched polymers" by Tom McLeish has a thorough introduction to rheology relevant to polymers followed by a discussion of the Rouse model for entangled and reptating chains. The final discussion is of branched entangled polymers.

Chapter 5: "Introduction to colloidal systems" by Daan Frenkel introduces colloidal suspensions and the forces between colloidal particles leading into colloidal phase behavior, colloid dynamics, metastability and non-equilibrium dynamics. The discussion focuses on simulation data and theoretical interpretation of the phenomena.

Chapter 6: "Computer simulations in soft matter science" by Kurt Kremer introduces the concepts of molecular dynamics and Monte Carlo simulations. Polymer conformations and network structures are then discussed followed by a discussion of experimental data with reference to the theory.

Chapter 7: "Equilibrium and flow properties of surfactants in solution" by Didier Roux introduces surfactant systems and their phase behavior with the effect of shear on lyotropic lamellar phases and onion textures concluded with theoretical models of the onion texture.

Chapter 8: Alan Bray discusses "Coarsening dynamics of non-equilibrium phase transitions." The chapter deals with the dynamics of the transition from disordered to ordered phases. The focus is on nucleation and growth with particular reference to the Ising model.

Chapter 9: "Phase transitions in non-equilibrium systems" by David Mukamel begins with a description of thermal equilibrium properties through to non-equilibrium properties using symmetry, dimensionality and the range of interactions.

Chapter 10: "Supercooled liquids and glasses" by Walter Kob covers supercooled liquids and the glass transition with computer simulations, equilibrium relaxation dynamics and out-of-equilibrium dynamics.

Chapter 11: "Aging in glassy systems: new experiments, simple models and open questions" is covered by Jean-Phillipe Bouchaud where the different types of aging with reference to simple models is discussed.

Chapter 12: "Phase separation and aggregation in colloidal suspensions" by Henk Lekkerkerker introduces the topic from the Perrin and Ossager perspective with hard spheres, attractive potentials, colloid/polymer and colloid/colloid mixtures being discussed.

Chapter 13: "Thermodynamics and Hydrodynamics of hard spheres: the role of gravity". Here Paul Chaikin covers the work undertaken in a NASA program to study the crystallization of hard sphere suspensions in microgravity where gravity is attributed to jamming the particles in a nonequilibrium state.

Chapter 14: "Granular materials: static properties as seen through experiments" by Sidney Nagel covers experiments

performed to elucidate the structure of granular materials including force distributions, sound propagation and compaction and jamming.

Chapter 15: by Michael Cates on "Stress transmission in jammed and granular matter" introduces the simple model of jamming in colloids and discusses how this relates to fragille matter and fragility. The conclusions are drawn from the concept that granular matter may be viewed as a jammed state.

Dave Dunstan
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FUTURE MEETINGS OF THE SOCIETY

73rd Annual Meeting
Bethesda, Maryland
October 21-25, 2001

74th Annual Meeting
Minneapolis, Minnesota
October 13-18, 2002

75th Annual Meeting
Pittsburgh, Pennsylvania
October 12-16, 2003

PHYSICS TODAY AVAILABLE ON-LINE

The American Institute of Physics recently announced that the full editorial text of Physics Today is now available on the web. Please contact Mr. Paul Guinnessy, the Online Editor, for details. Paul's e-mail address is pguinnes@aip.org.

PAAR PHYSICA RELOCATES

Paar Physica USA, the US distributor of rheometers manufactured by Anton Paar GmbH, Graz, Austria and its subsidiary, Physica Messtechnik, Stuttgart, Germany has relocated to Glen Allen Virginia. Readers may contact Tammy Madrigal, the Marketing Director, at (800) 722-7556 for additional information.

CHANGE OF ADDRESS

If you are moving, please inform Janis Bennett by phone at (516) 576-2403 or by fax at (516) 576-2223. You may also write to her at:

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The Society of Rheology

Statement of Revenues and Expenses

2000 Projection, 1999 Actual, 1999, 2000 and 2001 Budgets

Units: USD

		1999 Budget	1999 Actual	2000 Budget	2000 Year-end Proj'ction	2001 Budget
2.	***REVENUES***					
3.	Dues	59,000	58,440	61,000	59,000	68,000
4.	Interest	37,000	32,347	38,000	46,000	41,000
5.	Journal of Rheology	229,600	246,514	213,700	218,700	242,000
6.	Mailing List Sales	300	130	300	590	300
7.	Bulletin Advertising	850	1913	850	3100	1700
8.	Annual Meeting	5,000	0	0	17,164	0
9.	Short Course	4,000	0	4,000	4,004	4,000
10.	**TOTAL REVENUE**	**335,750**	**339,344**	**317,850**	**348,558**	**357,000**
11.						
12.	***EXPENSES***					
13.	AIP Dues Bill & Collect.	8,500	9,391	9,000	9,100	9,800
14.	AIP Adm. Services	9,000	9,000	9,000	9,000	9,000
15.	AIP Mem. Soc. Dues	7,600	7,963	7,800	8,050	8,200
16.	AIP Financial Handling	3,600	500	0	0	0
17.	AIP Phys. Olympiad	1,500	0	1,500	1,500	1,500
18.	Misc. Contributions & Prizes	1,000	1,000	1,000	0	1,000
19.	Renewal Billing	4,500	4,959	5,000	5,100	5,200
20.	Journal of Rheology	233,600	262,357	241,900	252,000	254,000
21.	Bulletins and Abstracts	13,000	17,555	13,000	7,480	12,000
22.	Short Courses	3,000	0	3,000	0	0
23.	Bingham Award	6,000	5,046	6,000	126	12,000
24.	Executive Cmt. Meetings	7,000	7,758	7,500	9227	7,600
25.	Pres. Discretionary Fund	1,500	566	1,500	1,500	1,500
26.	Treas. Discr. Fund	1,500	70	1,500	302	1,500
27.	Progr. Chm. Discr. Fund	2,000	0	2,000	0	4,000
28.	Secretarial Services	1,000	0	1,000	0	500
29.	Mailing	4,000	4,407	4,000	995	3,000
30.	Office Expense	2,000	507	2,000	1,500	1,500
31.	Banking Services	250	137	250	230	250
32.	Liability Insurance	1,803	2,647	1903	3,325	3500
33.	Membership Directory	7,000	0	0	0	0
34.	Membership Broch. & Appl.	0	578	1500	250	0
35.	Accountant	1,700	1,517	1,800	1560	1,900
36.	Student member travel	6,000	3,214	7,000	0	9,000
37.	Adv. Dep. for future mtg.	3,000	0	3,000	2,000	3,000
38.	Miscellaneous	2,500	215	2,500	2,600	1,500
39.	**TOTAL EXPENSES**	**332,553**	**339,387**	**334,653**	**315,845**	**351,450**
40.						
41.	Net Income	3,197	-43	-16,803	32,713	5,550
42.	ASSETS (excl. reserves)		29,443		61,000	

Notes:

2000 Budget as approved at Madison meeting. 2001 Budget to be presented at the Hilton Head meeting

Line 4: Interest for 2000 higher than usual because of maturing Treasury Note in July

Line 5: 1999 Actual includes $13,453 of CD sales. Revenue excludes subscriptions paid for future years. 2001 Revenue based on $550 subscription rate.

Line 8: Because the closing date for Madison meeting accounts was March 2000, the 1999 Actual shows meeting and short-course revenues and expenditures of zero. The 2000 Projection shows the actual Madison meeting and short course revenues and expenditures.

Line 20: Actuals and Projection include minor journal expenditures not paid through AIP.

Line 23: 2000 Budget was for Committee expenses; 2001 Budget includes awards of $2500 and $5000, plus expenses.

Line 41: Surplus for 2000 Projection due mainly to Madison meeting and healthy JoR revenue.

Journal of Rheology

Statement of Revenues and Expenses
2000 Projection, 1999 Actual, and 1999, 2000 and 2001 Budgets

Units: USD

1.	1999 Budget	1999 Actual	2000 Budget[C]	2000 Projection[D]	2001 Budget[E]
2.					
3. Subscriptions	195,050	201,845	186,000	187,000	211,750
4. Reprints	9,800	10,334	7,800	6,000	8,400
5. Advertisements	18,000	19,146	18,000	22,843	19,500
6. Electronic pub. [A]	5,000	13,453	0	2,350	0
7. Miscellaneous	1,750	1887	1,900	503	2,350
8. TOTAL REVENUES	**229,600**	**246,665**	**213,700**	**218,696**	**242,000**
9.					
10. Adver./Marketing	9,800	9,266	8,500	11,500	10,400
11. Reprints, Singles	8,300	10,686	9,000	13,400	10,100
12. Paper, Printing	38,000	38,311	42,000	32,800	39,000
13. SOR Editorial	45,000	50,555	49,000	43,000	45,000
14. Production	75,950	87,428	79,000	73,000	78,400
15. Fulfillment	8,250	7,953	7,900	7,950	7,850
16. Distribution	20,300	22,868	22,000	15,520	22,300
17. Electronic pub. [B]	28,000	35,290	24,500	51,700	39,100
18. TOTAL EXPENSES	**233,600**	**262,357**	**241,900**	**248,870**	**252,150**
19. Profit	**-4,000**	**-15,692**	**-28,200**	**-30,174**	**-10,150**

Notes:

[A] Line 6, of 1998 and 1999 Actuals are from CD sales; JoR Online has virtually no income.

[B] Line 17. Electronic publishing actual for 1999 is for Model 2, and includes a one-time upgrade fee of $7,600. 2000 Budget excludes one-time fees for back-issue installation and extra storage charges. 2001 Budget includes full storage charges for all back issues.

[C] As modified and approved at the 1999 Madison meeting. Excludes recently approved back-file installation fee of $12,600 (estimate).

[D] Projection based on AIP's October 2000 Receipts and Disbursements summary. Includes back-file installation fee.

[E] Proposed 2001 budget for approval at the 2000 Annual meeting. Assumes $550 institutional subscription rate, 385 institutional subscriptions and 1600 pages.

The Society of Rheology
Assets and Liabilities
2000 Year End, Projected

Units: USD

ASSETS	
Cash in checking account	6,000
CD	15,000
Balance in AIP account	775,000
	796,000
LIABILITIES and RESERVES	
Deferred subscription revenue	130,000
Deferred member dues	40,000
Publication reserve	450,000
Student travel grant reserve	10,000
Annual Meeting reserve	35,000
Operating reserve	70,000
	735,000
Net available funds	**61,000**

Summary: The financial position of the Society should improve slightly this year due mainly to the financially successful Madison meeting and short course, along with less-than-anticipated decreases in JoR institutional subscriptions and lower-than-normal page count. Increasing interest rates have also helped. Unfortunately all of these factors are highly variable and largely unpredictable. In addition we should be aware that the positive effects of the increase in JoR institutional subscription rate ($475 to $550) and the slowing loss of subscriptions, will undoubtedly be partially offset by anticipated increases in JoR production costs and JORO platform fees. However, it appears that dues can be held at their present level through 2002.

Respectfully submitted
Montgomery T. Shaw
Treasurer