

NEW YORK CYCLE CLUB INC.

JAN 78

PRESIDENT and
INFO. CONTACT
Bill Cooper
183 Wyckoff St.
Brooklyn, NY 11217
(212) 596-9537

JAN. 1978

V.P. - PROGRAMS
Bob Herzfelder
245 West 107 St.
New York, NY 10025
(212) AC2-0853
(after 7:30 PM)

• Aaron Bisberg on
ISRAEL BY BIKE
slide show and comments

V.P. - RIDES
Jimmy Rex
17-14 Putnam Ave.
Ridgewood, NY 11227
(212) 381-7180

• Vinnie Fabucci presents
SURPRISE DELIGHT
for the first 25

TREASURER
Robert Perl
505 East 82 St.
New York, NY 10028
(212) 988-2232

BULLETIN EDITOR
Deborah Wheaton
319 East 24 St. #13E
New York, NY 10010

arrivals at our next

SECRETARY
Sara Flowers
111-50 76 Road #4L
Forest Hills, NY 11375
(212) 544-9168

MEETING

CIRCULATION MGR.
Mel Shleifer

Tues. - Jan. 17, 1978

MEMBERS AT LARGE
Les Bercow
Phil Giles
Bill Baumgarten

RINALDO'S REST. (1 flite up)
32 E. 32 ST. (near Lex. Ave'l'c)
6PM - Cocktails, Vinnie's Delight
6:45 - Dinner, Conversation
7:45 - Entertainment

PAST PRESIDENT
Irv Weisman
(212) LO2-7298
(212) 650-8075

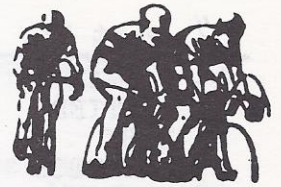
		RATING		SUBTOTALS				=	
		Rider	Leader	# of Trips	Leader Mileage	# of Riders	Participants Mileage	D	
1	BAUMGARTEN Bill	A	*	4	135	23	1051	-	
2	BASHKIN Helen	A	Cruiser	1	30	1	30	-	1 30
3	BERCOW Lester	A+	**	3	280	20	1600	-	
4	BERGMAN Roger	B	Trainer	1	28	9	255	-	1 28
5	BORGIDA George	A	Cruiser	2	65	15	345	-	1 30
6	CALDIERO Marie	B	Trainer	-				-	
7	CALLAHAN Ann	A	*	3	95	34	1290	-	2 45
8	CARROL Peter	B	Trainer	1	34	5	170	-	1 34
9	CARTER Eric	A	Trainer	6	123	40	814	-	6 123
10	CARTER Gloria	A	Trainer	6	123	40	814	-	6 123
11	COHEN Sherman	A	Trainer	2	55	20	550	-	2 55
12	COOPER Bill	A+	****	4	507	15	1926	-	
13	FREEDMAN Howard	A	Cruiser	1	40	5	200	-	
x14	FREEDMAN Sam	C	Trainer	1	25	1	25	-	1 25
15	FREIREICH Susan	A	Cruiser	3	90	22	755	-	1 15
16	GEWIRTZ Lorraine	A	Trainer	7	164	56	1330	-	7 164
17	GIDDY Ian	A	*	1	70	17	1213	-	
18	GILES Phil	A+	*	2	125	17	1045	-	
19	GILETA Frank	AA	****	4	477	11	1361	-	
20	GOLDBERG Al	A	Cruiser	1	35	13	455	-	
21	HERTZFELDER Bob	A	Cruiser	1	25	5	65	-	1 25
x22	IRIZARI Ralph	AA	*	1	51	1	51	-	
23	KRATKA Irv	A	Cruiser	1	46	10	460	-	
24	KRAUS Vera	B	Trainer	2	35	2	35	-	2 35
25	LABUSH Gerry	A	*	1	61	7	427	-	
26	LACK Harry	A	Cruiser	1	30	6	180	-	1 30
x27	LAMPETER Ernie	A	Racer	-				-	
28	LOPER Chuck	A	*	5	265	30	1490	-	1 25
29	MESSING Joe	A	Trainer	1	15	2	30	-	1 15
30	ORIEZ Charlie	B	Trainer	2	45	15	350	-	2 45
31	PERL Bob	AA+	**	2	150	25	1500	-	
32	REX Jim	AAA+	*****	9	1303	29	3133	-	
33	RUBIN Hugh	A	Trainer	1	25	2	50	-	1 25
34	RUTTEN Harry	A	*	7	361	46	2307	-	1 30
35	SANCHEZ Frank	A	(*)	-				-	
36	SHLEIFER Mel	A	*	5	202	36	1307	-	3 84
37	SHLEIFER Norm	A	(*)	1	27	1	27	-	1 27
38	SMITH Lucille	A	Cruiser	2	52	12	412	-	2 52
39	VICKERS Max	A	(*)	-				-	
x40	WEINER Marian	C	Trainer	-				-	
41	WEISMAN Irv	A	*	10	371	116	4812	-	2 55
42	WISE Bob	A	*	1	50	7	350	-	
43	WOHL Vivian	B	Trainer	1	25	10	250	-	1 25
NYCC Totals				107	5631	719	32465	-	48 1145
w/o overlap ,,				83	4681	491	23787	-	35 824

Outstanding Service

1)	WEISMAN Irv	- inspite of being the most "Rained out" leader too.	1)	GEWI
2)	REX Jim		2)	CART
3)	RUTTEN Harry		3)	CART
4)	GEWIRTZ Lorraine		4)	SHLE
5)	CARTER Eric		5)	COHE
,,	CARTER Gloria			



Rides For The Month



NO RIDE IS TOO SMALL OR TOO BIG, IF THERE IS A LEADER FOR IT !

Send your ride information in advance to V.P.-Rides (Rides Chairman) by 17 January for next February bulletin period ending in March, or contact him by phone if not at the monthly meeting in person.

Sunday - MYSTERY RIDE "B", Hugh Rubin - leader. Exact distance and destination will be determined by callers interest. Starting point will likely to be Union Square. (Repeat of 11 Dec). Call early to form group; (212) 677-7295, ride cancelled in the low 20 F - s.
15 Jan

Sunday - JANUARY THAW RIDE (expected), 60-70 miles "A". Steve Bauman, leader of joint AYH venture: meet 8:00 AM Hillside Ave & 179th St of Jamaica, Queens for a Jones Beach round trip. Ride will be postponed if 40 F at starting time or the expected high for the day wouldn't reach 50 F. Same goes for 15 mph or more wind, slippery or wet road.
15 Jan

If warranted by above conditions, 22nd & 29th January Sundays are applicable instead as reserved dates for the ride.

ALL MONTH-DIAL A RIDE "A-B" between 50-100 miles each weekend. Dan Smith's winter ride clearing house is still open to form group riding toward Bear Mountain. Call your leader early (212) 533-3403.

ALL MONTH-DIAL A RIDE. Mostly "B" in the N.J. area. Harry Rutten, leader is willing to form a riding group if you call early, (201) 327-7197.

ALL MONTH-DIAL A RIDE, mostly "A" from Queens-Brooklyn area to Long Island. Sundays only. Call Jim Rex who's trying to keep his "Ironlegs" from getting rusty (212) 381-7180.

RIDE PREVIEW

5-9 March - 12th Annual WHEELMEN'S WINTER RENDEZVOUS hosted by Dr. P. Dudley White B.C., Po Box 1368, Homestead, Florida 33030. Ride goes rain or shine. Make your reservation as early as possible. Frank Sanchez will help to organize NYCC participants.

REGULAR RIDES - LEADERLESS

CENTRAL PARK	10:00 AM	Sat. & Sun.	from Boathouse
BEDFORD VILLAGE	10:00 ,,	Sun. ,,	Firehouse
WESTCHESTER	9:15 ,,	Sat. ,,	Milkmaid Diner
LONG ISLAND (Roslyn)	10:00 ,,	Sat. & Sun. ,,	I.U. Willets School parking lot
EASTERN LONG ISLAND (Bridgehampton)	10:00 ,,	Sun. ,,	Soporific Bike Shop Montauk Hwy (Rt 27)

JANUARY DATA SUPPLEMENTS

Total 17 rides = 11 of A and 6 of B, mostly on Sundays

4 Part II.

44	BAUMAN	Steve	AA+	*****	11	1201	596	55824							
45	CARTIER	Ray	A	Cruiser	1	44	7	328							
46	DOBY	Fred	A	*	2	85	35	1525							
47	GALAMBOS	Andy	A	*	5	125	212	6180	1	10	11	110	3	65	
48	GERBER	Mike	A	*	2	59	14	659	1	9	1	9	3	83	
49	HOFFMAN	Bill	A	Trainer	4	123	71	2266							
50	KRUMWIEDE	Henry	A	*	2	117	6	405							
51	KUHN	Marv	A	*	2	115	18	1065							
52	LONG	Jim	A	*	3	131	20	794							
53	MEYER	Myrna	A	Trainer	12	275	104	2264					10	210	
54	MEYER	Paul	C	Trainer	1	15	5	75					1	15	
55	PELLEGRINO	Jerry	A+	Cruiser	1	38	25	950							
56	RECHT	Bill	A+	*	1	70	25	1360							
57	RODBELL	Joel	AA	**	1	100	93	9300							
34a	RUTTEN	Harry	A	*	2	120	15	900							
58	SCHWARTZ	Bill	A	*	3	125	69	2620					2	45	
59	STEINHARD	Walt	B	Trainer	1	20	8	160					1	20	
160	WIGODNER	Joe	A+	**	5	360+	13	360+							
JOINT CLUB Totals					59	3123	1336	87035	2	19	12	119	20	438	
W/o overlap ,,					57	2965	1043	66135	2	19	12	119	20	438	

OUTSTANDING SERVICE: 1- Bauman S, 2- Galambos A, 3- Meyer M, 4- Schwartz W, 5-

Part III.

61	BOLLAG	Francis	AA+	**	1	115	120	13800	-					
62	FREEDMAN	Darryl	A	*	2	85	8	355	-					
63	FREEDMAN	Jeff	A	Assist'	2	85	8	355	-					
64	FREEDMAN	Mary	A	Trainer	1	15	7	105	-				1	15
65	FREEDMAN	Sharon	B	Assist'	1	15	7	105	-				1	15
66	FARRANT	Ellen	A	Cruiser	2	83	230	12350	-				1	25
67	KAGAN	Karen	B+	Cruiser	1	17	7	119	-					
68	KAHN	Ron	AAA	**	1	100	225	22500	-					
?69	LORD	Dick	A	*	1	58	75	4375	-					
70	TOGO	Ramsey	A+	**	1	105	2	210	-					
Associates' Total					13	678	689	54274	-				3	55
w/o overlap ,,					9	463	554	40014	-				2	40

OUTSTANDING SERVICE: 1-Kahn R. 2-Farrant E. & Bollag F. 3-Freedman D. & J. 4-Lord

Parts I-II-III		Combined Totals		149	8109	2088	129936	= 2	19	12	119	57	1302
Trip	Percentages	100					= 134						3826
Leader Miles	,,		100				= .23						1606
Participation	,,			100			= .57						
Club Milage	,,				100		= .09						

SUPPLEMENTARY DATA

Year	**	* Leader-Trip-Miles	* Rider-Miles	Trip Averages @ Rider & Distance	
1972		19	37		
1973	3	15	30	46	2580
1974	4	11	28	58	3188
1975	6	10	28	105	5948
1976	10	14	57	130	8403
1977	11	25	70	149	8109
					1577
					89490
					12
					57
					14
					62

NOTE! Not including the preliminary planning stages of events: this account is the result of 117 hours of clerical effort, pertaining to 8412 hours of riding at 15½ (6-28) mph, using \$ ½ million worth of equipments at \$ 250 (80-800) each. We also had a safe and good year.

Based on A	
R	Leader
A	Ride
T	Terrai
I	Factor
I	Milage
N	S "D"
P	"C"
E	"B"
E	"A"
S	"A"

FROM THE VEEP'S DESK

Happy New Year one and all as we welcome another year of good bicycling and long lasting friendship.

As we get rolling into 1978, the first event of note will be our monthly meeting at Rinaldo's on Tuesday, January 17th. This will be the first meeting conducted by your new officers and board. The main event of the evening will be a slide show of bicycling in Israel by one of our neighbors from the "Country Cycle Club" Aaron Bisberg. This show should be most interesting both from the cycling aspect as well as the timeliness in view of the fast moving events taking place in that part of the world.

Other shows which we hope to present at future meetings will feature such tours as Bermuda, Nova Scotia, Cross country, and the long weekends at which the New York Cycle Club participated to a large degree. Watch your bulletin for these coming attractions.

For anyone planning a winter vacation, I would like to suggest the Wheelmen's Winter Rendezvous which is sponsored each year by the Paul Dudley White Bicycle Club of Homestead, Florida. In 1978 this event will take place in Homestead from Sunday, March 5th through Thursday, March 9th. If anyone is interested kindly contact me any evening after 7 PM. I will gladly give them all the information on hand. I have attended this rendezvous the past three years; and it is well worth the while. The people in Homestead are most friendly and are exceptional hosts. If you would like to ride in an area completely free of hills, this is it. There isn't one hill for miles and miles; but there is much to see and plenty of good riding.

In closing, let me add this reminder. Don't forget to send in your dues for 1978 now if you want to continue getting your bulletin without interruption. By the way I have it on good authority that the bulletin will be on time this year.

In the meantime - keep those wheels spinning.

Bob Herzfelder

ELECTION RESULTS FOR MEMBER AT LARGE

These were the only contested elections. The other officers are listed on the first page. The returns were smaller than expected for so hot an election. The mail-in ballots were in complete agreement with the club vote, as was the much earlier By-Laws Referendum.

Les Bercow 37 Phil Giles 34 Bill Baumgarten 32 Chuck Loper 19

RENEW NOW RENEW NOW RENEW NOW RENEW NOW RENEW NOW RENEW NOW RENEW NOW RENEW

NAME PHONE

ADDRESS APT.

CITY STATE ZIP

___\$7 ___\$10 Make out your check to New York Cycle Club, Inc.

Mail to: Robert Perl, Treas. 505 East 82 Street New York, NY 10028

RENEW

RENEW

ASSETS

Balance brought forward from 1976	\$ 238.74
Memberships (1977 - 284 members)	1582.16
Labor Day Weekend	<u>1036.22</u>
TOTAL	2857.12

DISBURSEMENTS

Printing	909.90
Postage	373.74
Internal Expenses	210.47
External Expenses (guest speaker)	34.15
Labor Day Weekend	1036.22
Rebates on Dues (joining after Labor Day)	<u>18.00</u>
TOTAL	2582.48

CURRENT BALANCE 274.64

NORTH JERSEY BICYCLE TOURING CLUB

North Jersey is on its way to having a new bicycle club which will be headed by two of our NYCC members, Harry Rutten and Hank Hirschmann. Membership will be open to individuals 16 years and older, and to families and their children.

They will be holding their first meeting in the Ramsey Public Library at 30 Wyckoff Ave. Ramsey, NJ on Tues. Feb. 14 at 8 PM sharp. The monthly meetings will be devoted to:

- 1) Setting up a rides program for all levels of cycling ability. (Suggested minimum is 25 miles in 3 hours.)
- 2) Maintenance and repair clinics, covering all phases of bicycle repair.
- 3) Affiliation with the League of American Wheelmen (L.A.W.) to further the cause of bicycling and to participate in weekend (or longer) rallies.
- 4) Speakers and programs of interest to the cyclist.

For further information call evenings:

Harry Rutten (Ramsey, NJ)
327-7197

Hank Hirschmann (Montvale, NJ)
391-6871

Harry still plans to lead some of our Rockland rides over hill and dale to delight our stronger riders. (The "strong" part is necessary because we first have to get up to Tappan, our jumping off point for Harry's Rockland rides, and then go on a 35 to 45 mile hilly ride. These make excellent "A" portions of our All-Club Rides.) Harry has also contributed some routes in Rockland County which will appear in this issue or the next issue of our bulletin.

HELMETS HELMETS HELMETS HELMETS HELMETS HELMETS HELMETS HELMETS

Send \$26 and the circumference of your head (or your hat size) to Harry at 78 Elbert St. Ramsey, NJ 07446 and get a Bell Helmet by return UPS. It's becoming the smart thing to do - insure your head, that is.

173	4670	1	58	200	11600	8	743	352	36274	2	400	44	7950	2	2	Q
		2	85	35	1525	1	44	7	328					-	-	W
47	1306	1	50	28	1400									-	-	M
		1	50	13	650									-	-	Q
90	1809	1	40	24	960	1	72	5	360					-	-	B
5	75	1	45	1	45	1	65	11	715					-	-	W
		3	131	20	794									1	1	N
		2	65	14	455									-	-	J
51	1160	1	38	25	950									-	-	L
8	160					1	70	25	1360					-	-	I
		2	120	15	900	1	100	93	9300					2	2	L
						1	80	18	1460					-	-	N
		3	170	13+	360+	2	190							-	-	J
374	9180	19	902	395	19989	16	1364	511	49797	2	400	44	7950	6	10	
374	9180	18	844	195	8389	15	1264	418	40497	2	400	44	7950			

Hoffman W,

7	105	2	85	8	355	1	115	120	13800							MV
7	105	2	85	8	355											W
30	750	1	58	200	11600											W
		1	17	7	119											W
		1	58	75	4375	1	100	225	22500							L
						1	105	2	210							Q
44	960	7	303	298	16804	3	320	347	36510							L
37	855	6	268	295	16699	1	155	222	22460							M

R. 5-Togo R.

605	14757	47	2053	679	33512	31	2670	712	68340	12	2065	80	13208	31	33
2898	11.36	3154	25.32	3252	25.79	2081	32.93	3410	52.60	8.05	25.46	383	1016		

Fig 74, Dec 75-76-77 data

Trainer - Cruiser																						
D	C	B	A	A+	AA-	AA	AA+	AAA-	AAA	AAA+												
Flat					Rolling					Hilly												
1	2	3	4	5	6	7	8	9	10	15	20	25	30	35								
10	15	20	25	30	35	40	50	60	70	80	90	100	125	150	175	200	225	250	275	300	325	350
5-6 mph																						
7-10 mph																						
11-13 mph																						
14-17 mph																						
18+ mph																						
24	22	20	18+					15	13	10												

ANNUAL MEETING REPORT

We are running short of space, so I have to curb my usual tendencies to run off at the typewriter. Thus many of the hilarious awards which were passed out at the meeting will not be reported on in this issue. However, at least one award deserves full treatment, both because the recipient deserves his recognition, and because of the fine job Anne Callahan did in capturing the mood of his great feat.

THE FIRST AND PROBABLY THE LAST "ANNUAL MANILA FOLDER AWARD"

Having started cycling in the summer of '76, this past year was my first full year with the club. And so I kept my eyes and ears open for what I might learn from the more experienced club members. I learned a lot about bike mechanics from Irv, the physiology of cycling from Al Goldbrg, how to take care of tubular tires from Joe Wigodner, but Harry Rutten is the man who impressed me most during the past year.

On one trip in early spring, during which I was freezing and he was nice and warm, he pointed out to me the advantages of wearing warm-up suits which I had not known about before then. On another trip I learned his trick of storing spare spokes in the handle of his Zefal pump, and securing them with a piece of inner tube. These were relatively minor points, however. It was at the April club meeting that I, the aspiring cyclist, was most impressed with Harry, his skill, and know-how.

At that meeting, Harry, Irv, and Stu Shackman presented their views on gearing, with Harry representing the 15 speed cyclist. He spoke about his three chainrings, his five sprockets, his low gear, his high gear, his middle gears, etc. When someone asked him, "Wasn't it difficult to keep track of all those gears, and to know which chainring and which sprocket to switch to and when?" Harry admitted, "Yes, it was ^{very} difficult." And the one way he had found to master it successfully was to ride down the road with a manila folder in one hand, with the folder in front of his face, so that he could always read which gear he should be in, and most importantly, which switching pattern he should use when shifting from one gear to the next.

He said that his method did present problems in traffic since his folder blocked out all cars, but that he had solved that problem by drilling peepholes through the folder. He said that it was difficult, too, in the rain, since his folder soaked through. But no matter, he was not going to give up his folder. He had ridden over 3 thousand miles with it during the previous year alone, and it worked far better than the 15 pound calculator he had previously tried hooking up to the back of his bike.

I asked Harry how he had developed his ability to ride with his eyes rivetted on the manila folder. He told me it took years of getting up every morning and jogging while reading the NY Times, driving to work with the latest best-seller spread out in front of him, and coming home at night and riding the rollers while watching the 7 o'clock news. I myself tried roller riding while holding a manila folder. But after bruising myself from falling over several times, I decided to stick with the less complicated 10 speed arrangement and to forego the need for the manila folder and its gear charts.

But as for Harry, I thought it only fitting that, in recognition of his impressive and unique skill in riding a 15 speed while carefully studying his gear charts for greatest efficiency in shifting, the club should award him with a certificate and a brand new, complete with peepholes, weather-proofed manila folder to get him through his next season of cycling.

In a future issue we must report on the other awards presented to inspiring members whose examples can spur us on to great glee and choking fits of laughter.

RIDE LEADERS 1977
Oct 77)

by James C. REX
Vice President of Rides

C		B				A				A+				Rained out	Cancelled	Residence
1	30	3	55	21	891	1	80	2	160					3	1	M
9	255					3	280	20	1600					-	1	M
6	180	1	35	9	165									-	3	Q
19	540	1	50	15	750									-	1	M
5	170													-	1	NJ
40	814													-	-	SI
40	814													-	-	SI
20	550													-	-	B
						1	102	3	306	3	405	12	1620	2	1	B
		1	40	5	200									1	-	B
1	25													-	-	M
2	30	2	75	20	725									-	1	M
56	1330													-	-	M
						1	70	17	1213					3	-	M
						2	125	17	1045					-	-	M
		1	41	3	107	1	80	1	80	2	356	7	1174	1	-	M
		1	35	13	455									-	-	B
5	65													-	1	NJ
		1	51	1	51									-	-	M
		1	46	10	460									-	4	BX
2	35													-	-	M
6	180	1	61	7	427									1	-	M
														1	-	B
1	25	2	91	24	1100	2	140	5	365					-	-	M
2	30													-	1	M
15	350													-	1	Q
		1	50	20	1000	1	100	5	500					1	1	M
		1	63	7	133	2	186	2	186	6	1054	20	2814	-	-	Q
2	50													-	2	M
2	60	5	261	40	1967	1	70	4	280					2	-	NJ
19	579	1	40	9	360	1	78	8	368					1	2	LI
1	27													-	1	BX
12	412													-	1	Q
														1	-	B
														1	1	M
27	760	8	316	89	4052									5	1	M
		1	50	7	350									-	1	BX
10	250													-	1	M
303	7561	32	1360	293	13193	16	1311	84	6103	11	1815	39	5608	25	23	M
194	4722	23	941	189	8424	15	1251	72	5383	10	1665	36	5258			

C		B				A & A+			
MTZ	L.	1)	WEISMAN	I.	1)	REX	J.		
ER	E.	2)	RUTTEN	H.	2)	COOPER	W.		
ER	G.	3)	LOPER	C.	3)	BERCOW	L.		
LAN	I.	4)	PERL	R.	4)	GILETA	F.		
FER	M.	5)	BAUMGARTEN	W.	5)	GILES	P.		
	S.	,,	FREIREICH	S.	,,	LOPER	C.		

AYH SAT. BIKE REPAIR WORKSHOPS

At AYH (132 Spring St., NYC 431-7100) there will be Bike Repair Workshops where you learn to maintenance and repair on your own bike under supervision. Two series of sessions are scheduled: Jan. 21 (A) & Jan.28(B), and Feb.4(A) & Feb.11(B). The 'A' day topics include tires and tubes, pumps, rims, comfort adjustments, brakes and cables, chains, gear adjustments, and lubrication. The 'B' day topics include: hubs, head bearings, pedals, cranks, bottom bracket, chainwheels, freewheels, S.A. hubs, wheels & truing, and lubrication. On either day optional topics may be covered. Each session is from 11AM to 4PM at \$7.50 per session. Advance registration at AYH is suggested to insure your place in the course and to prevent cancellation for insufficient registration.

NUPTIAL ANNOUNCEMENT

Our outgoing Treasurer has established residence at 1 Sherman Sq., NYC 10023 (Apt.18F) where two bikes will soon be undergoing winter overhaul - his and his wife's. They were married (no, not the bikes, dummy) on Jan. 7, 1978 and are re-covering now. Send your congrats to Mr.&Mrs. Joe Messing, and thank him for leaving something in our treasury despite his high expenses this past month. GOOD LUCK!

FOR SALE: Assorted used bicycle components for use on city roadsters. Also, 2 ladies Roadster frames, 17" and 18" with or without the parts to make them rideable. Call: (212) 652-6176.

WANTED: A speedometer which works on air pressure. Call: (212) 652-6176.

NEW YORK CYCLE CLUB, Inc.
c/o Mel Shleifer
P.O. Box 1081
Mt. Vernon, NY 10551

FIRST CLASS