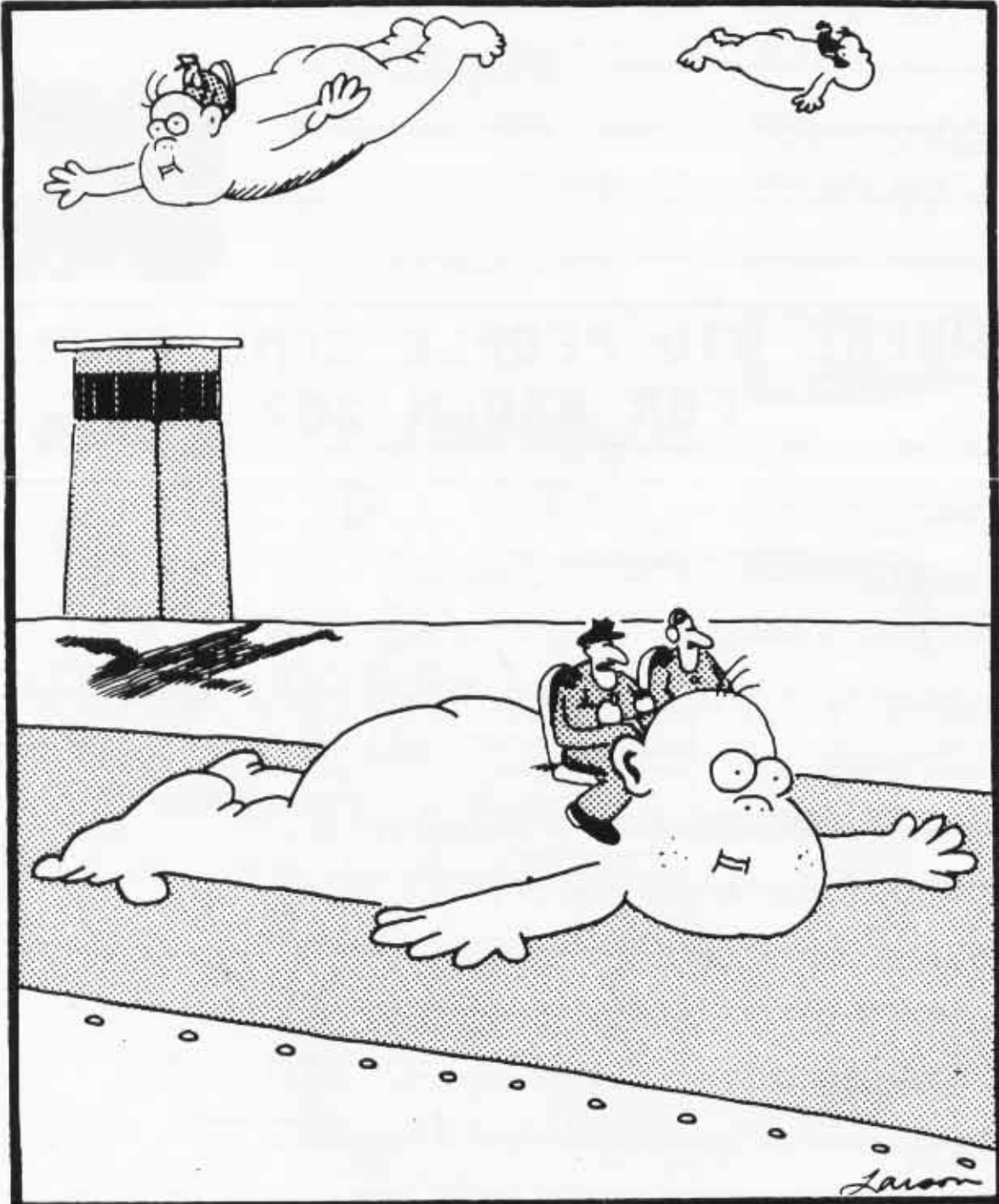


# THE LEADING EDGE



SEPTEMBER / OCTOBER 1986

1986 NATIONAL SECTION CHAMPIONS

VOL. 9 NO. 2

"Fuel ... check. Lights ... check. Oil pressure ... check. We've got clearance. OK, Jack—let's get this baby off the ground."



Barbara Bundick. This means the Leading Edge will be in good hands. Let's wish Barb good luck and send her some super material, OK?

The festival starts 7:00PM, Saturday, October 2, Room J143. Harper is Algonquin Road at Roselle & Palatine. Admission is \$5.00 with \$1.00 rebate if you last until the end of the festival! (It would help to be a masochist! - Ric) Don't miss this chance to see four of the worst science fiction movies of all times! Phone 397-3000 for more info.

HARPER COLLEGE'S  
"WORLD'S WORST  
FILM FESTIVAL"  
Goes To Outer Space

"I Married a Monster  
from Outer Space"

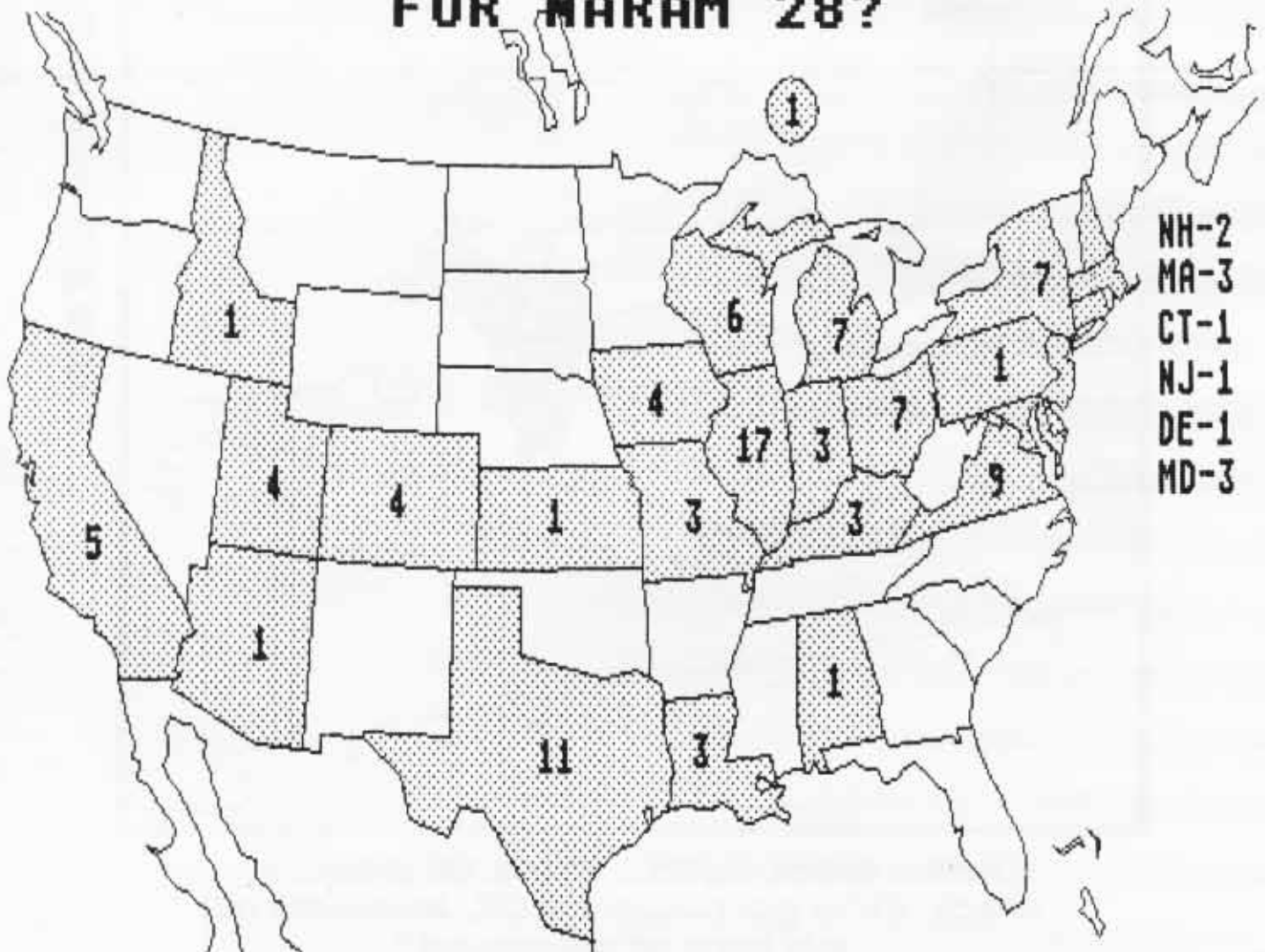
"Plan 9 from Outer Space"

"Santa Claus Conquers  
the Space Martians"

"X from Outer Space"



## WHERE DID PEOPLE COME FROM FOR NARAM 28?



## NIRA's Scheduled Events

**NIRA'S REGULAR SPORT LAUNCHES**

All dates shown are Sunday, and launches begin at 2 PM. Launches are held at Ackerman Park, at the intersection of St. Charles and Swift Roads in Glen Ellyn. Bring your own launcher and a good lawn chair. Look for everyone around the brick building in the far corner.

If you're doubtful about a launch due to weather, conflicting contest, etc. Contact Bunny (475-5048), Ric Gaff (724-2975) before heading to the field.

Sept. 27  
October 12      October 26  
November 9     November 23

**NIRA VICTORY PARTY - SEPT. 27**

Celebrate our second National Championship with the Kaplow's in lovely Palatine. Bring your own meat and fixin's. Bullet supplies the grill. See attached map for directions or call Bullet at 934-1160. The fun starts at 3 PM and goes till whenever we quit.

**MONTHLY MEETING - OCTOBER 3**

Glen Ellyn Civic Center, 7:30 PM

Review plans for our rocket classes and fundraising projects.

Don't forget your "Model of the Month"!

Space Camp is located next to the Space and Rocket Center, Tranquility Base in Huntsville, Alabama. The first day I was there we had a guest speaker who was a member of Werner Von Braun's rocket team. He told us in order to make a rocket you need a combustion chamber, a nozzle, a fuel and an oxidizer. We also learned that the father of rocketry was Robert Goddard. One of his first rockets is on display in the museum.

On the second day we learned about life support systems. These systems are oxygen, water, food, and waste management. We tried on space suits. They were heavy and sweaty. We also ate freeze dried food for lunch. It tasted just like regular food. Later we had a tour of a mock up Skylab and talked with Charles Walker, one of the astronauts.

Day Three, we experienced 3G's. This is three times our body weight. We also toured a million gallon neutral buoyancy tank. Then, we went to the swimming pool to simulate a water recovery with a bird cage. The bird cage is actually a rope cage. The next task we had was to change a film canister under water. The

Skylab astronauts did this exercise for a space mission to repair a satellite.

Our fourth day in Space Camp, we made and told about space stations. These were designed by each student. Later, we went to a laser laboratory to explore laser technology.

On the fifth day we simulated an actual space mission. My group, called Venus, achieved a perfect launch. Later that day, we had graduation where each student received their space camp wings and certificate. Part of the graduation was a press conference where each mission commander was questioned about the mission. I was commander of the Venus mission.

In addition to each days activities, we made rockets. After the one stage rockets were built and launched, two stage rockets were made and fired. We were given three rockets to work on during the week.

The week at Space Camp went by very quickly. I learned a lot and had a great time. I plan on going back next year.

**GET THEE AWAY!**

A U.S. space satellite project team had a series of miserable launch failures in 1959-60. Four or five times the rockets had exploded on or very near the launch pad. A few days before the next attempt was to be made, the satellite project manager traveled from Washington to Cape Canaveral for a prelaunch press briefing. "What's the object of this launch?" a reporter queried. Replied the project chief, "To get it out of sight. "

**THEY TRY TO FORGET IT**

One of the favorite anecdotes at Cape Kennedy involves Alan Shepard or John Glenn—depending on who is telling the story. The astronaut had spent hours in his spacecraft on the rocket launch pad before liftoff finally came. He later was asked what he had thought about during the long wait and replied, "I just kept looking around at all those dozens of instruments in front of me and remembering that every single one of them was supplied by the lowest bidder."

**COSMIC TRAILWAYS?**

"To the cosmos!" was the battle cry of early Soviet cosmonauts. But after taking almost unbearable punishment in vibration seats, centrifuges, and other devilish training devices that simulated rocket flight, they changed the motto slightly: "To the cosmos—by bus!"

From "A Funny Thing Happened On The Way To The Moon"

# Air Force Museum loses its prized Atlas missile

## Familiar display depressurizes, collapses

**By Tim Gaffney**  
STAFF WRITER

The Air Force lost another missile Wednesday. But it didn't blow up; it deflated.

The Atlas missile had been on display outside the U.S. Air Force Museum since the early 1970s. In what the museum termed "a major loss," the missile collapsed Wednesday evening after it developed a leak that caused it to lose air pressure.

The Convair Atlas was America's first intercontinental ballistic missile. NASA used it to launch John Glenn and other Mercury astronauts into orbit in the early 1960s.

But the launcher was originally designed to hurl nuclear warheads at the Soviet Union. The museum's Atlas was topped by a 1,000 pound nosecone. Its weight crumpled the missile when it depressurized, museum spokesman Richard Baughman said.

Designed in the 1950s, the Atlas utilized a novel technique called "balloon tank construction." Its thin outer skin doubled as walls for the propellant tanks. This made the missile lightweight, but it was so frail the tanks had to be kept under pressure to prevent

the sides from collapsing.

An air compressor kept the museum's Atlas tanks pumped up. The pressure appeared normal during a daily check Wednesday, Baughman said. He speculated that a leak developed late in the afternoon. He said a museum guard saw the missile collapse about 7:30 p.m.

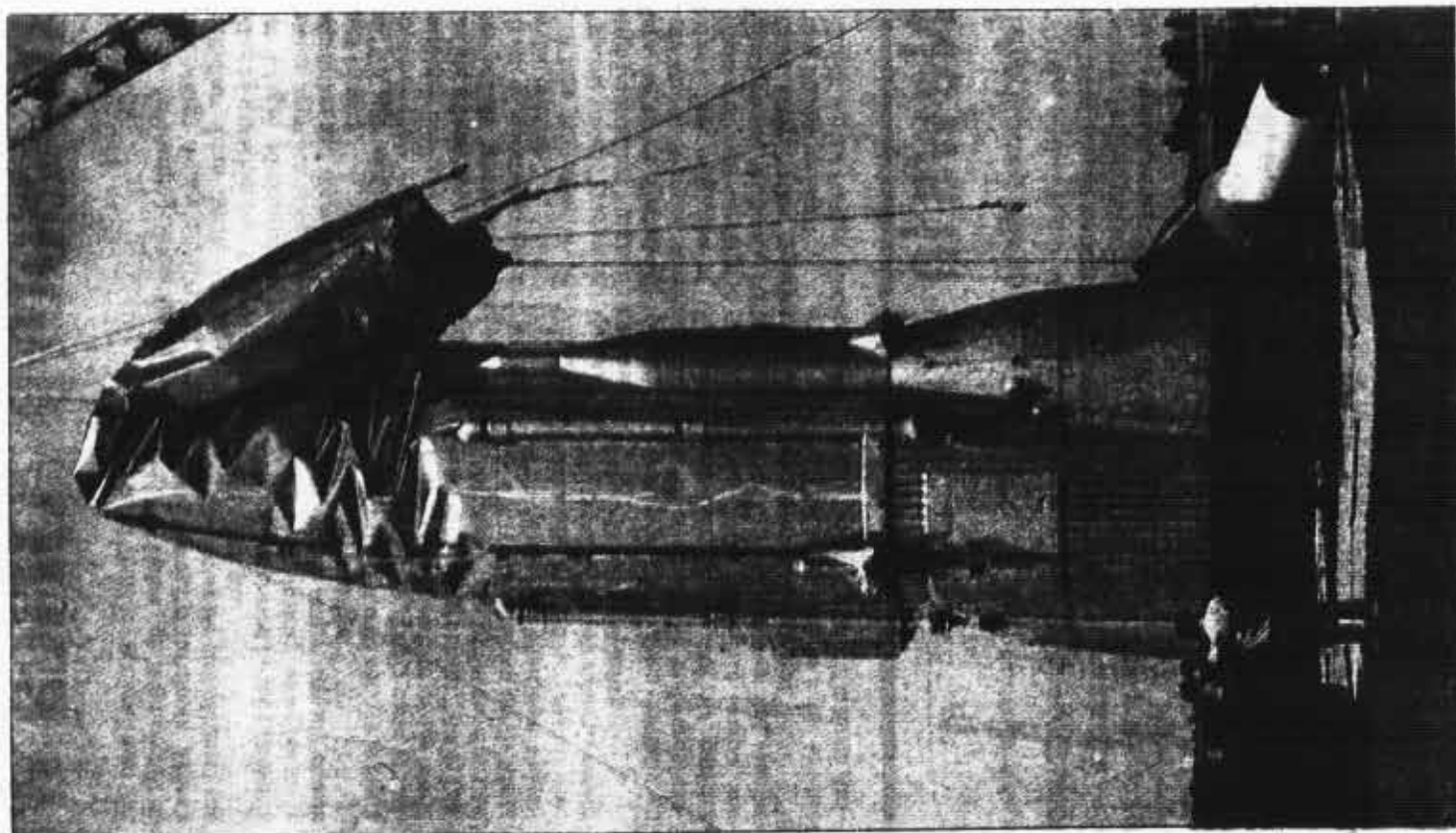
Baughman said he was glad the missile collapsed after visiting hours, and not while people might have been standing nearby. The nosecone hit the ground when the sides collapsed, he said.

"This is considered a major loss to us, since original Atlas missiles are extremely rare," museum curator Jack Hilliard said. "We can probably salvage the nose cone and the booster engines, but the upper portion of the missile is totally destroyed."

The missile replaced an earlier Atlas, which was given to a museum in Canada. The earlier Atlas stood near the main entrance at the museum's previous location off West Main Street in Fairborn. The missile never failed to draw attention — especially around Christmas, when its warhead was fitted with a giant red cap, a white beard and a Santa Claus face.

This little item was sent in by Larry London from a Dayton, Ohio newspaper. When I first got this from Larry my reaction was one of humor. After all, it does look rather funny. But then the shock came, the realization that a wonderful old missile display was now just so much scrap metal. I wondered why this missile was put on display without some kind of internal support. Why leave a 1000 pound nose cone on top of a metal "balloon"? And what of the other missiles on display at the Wright-Patterson Air Force Museum? Are any of them in similar danger? And not just to themselves but to museum visitors as well!

I've always enjoyed the Air Force museum at Wright-Pat. It's the best museum of it's type in the Midwest. I've been there many times in the past and plan to visit many more times in the future. So I can't help but be a bit worried about this whole business.



ASSOCIATED PRESS

Workmen dismantle collapsed missile at Wright-Pat

The wrong stuff

# MIDWEST ROTOCRAFT CONTEST

NIRA's annual regional moved south this year, to Chanute AFB, site of NARAM-28. MWRC's contestants were blessed with good weather and excellent cooperation from the Air Force. Thirteen competitors fought it out in eight events.

Times in 1/2A PD were good, averaging 145 seconds. Thermals weren't trashmovers, but lift was around to be had. Most people flew standard 1/2" dia. birds. Bullet Bob Kaplow had extraordinary boosts from his ancient tower. The Linders, using a Ric Gaff designed non-zero volume piston, reached outstanding altitudes as well.

1/2 A SD was more disappointing. The NIRA troops seems flat in this event, with the Dual Egglofters recording two DQ's from separations. No flights broke a minute, even though the models were similar to those flown in PD.

BHD was disappointing, too. The times weren't there. Don Linder did use a new design. He put the fins for the model on the tips of the rotors. When his Rotaroc style model deployed, the fins pop up with the rotors and don't act like speed brakes. His rotation speed goes up. He and son Donny used this design to good success, Donny winning in A; Dad taking second in C.

B Boost Glide saw a nice original design by Don Linder win C. It was a costly victory, however, since the little birdie thermaled away on Flight #2. Larry London took second on an ancient **Beaker**. Bullet Bob brought out a nice **Flanigan Flyer**, only to suffer a Red Baron on Flight #1. He finished third.

A RG saw a perfect example of thermal flying by Jedi George. His black tissue slide wing circled gracefully for over 4 minutes before getting eaten by a tree on the base. He flew a slide pod backup, but the pod didn't move an inch. The bird worked anyway and the return guaranteed

first place. Don Linder's second original glider design of the meet would have been stiff competition, but for a tight turn, and some lower-than-Jedi boosts.

Eggloft Duration, considered by some competitor to be a "dumb" event, has really caught on here in the Midwest. I think it has something to do with its fun. There doesn't seem to be a standard design or strategy to win. Almost anyone could take all the marbles. At any rate, big chutes dominated at MWRC.

Jedi George set the tone with a model build around a paper towel tube. It had a monstrous 48" chute. After a good boost, the model hovered over the stub runway for about three minutes. Bullet Bob, using his reliable **Parsec 33** boattail model, went the other direction, and won the event with over 7 1/2 minutes. The prang of the meet went to Todd Schweim. His **Holy Hand Grenade** tipped off the piston and power pranged on the runway.

Open Spot Landing left everyone needing more practice before NARAM. Bullet Bob led the way to a fairly close target with his CHAD HD model. It spun in to 19 1/2 feet. Most people were over 65' away. Bob Hart tried a good strategy, an old Estes **Birdie** with streamer recovery. His aim was off, but he inspired a lot of losers to consider rear ejection models and a "crash to target" strategy. Look out at NARAM for some weird flights!!!

Sport Scale ended the meet. Tom Hoelle, remembering his success at ETR, finished yet another **Genie** on the range. The strategy didn't work here, as Tom finished third. The judges didn't go for his paint pattern; too simple they said.

The real battle was between Jedi George's **Aerobee 350** and Dual Egglofter's **Saturn I-B**. Jedi used a huge chute to recover the

# M.W.R.C. -86 RESULTS

CONTESTANT	B ROOST GLIDE			A ROCKET GLIDE			B HELICOPTER DURATION			C EGGLOFT DURATION		
	1ST	2ND	TOTAL	1ST	2ND	TOTAL	1ST	2ND	TOTAL	1ST	2ND	BEST
Don C. Linder	87	RB	87	38	30	68	NDP	26	26	72	--	72
B.J. Tuleja							6	9	15	56	--	56
Tim Marcy	SHD	30	30	SHD	27	27	SEP	SEP		79	44	79
Don L. Linder	128	195	323	40	38	78	62	40	102	199	--	199
Dual Egglofters	RB	101	101	NG	26	26	NKT	40	40	447	--	447
Larry London	66	96	162	32	12	44	HRT	89	89	SEP	88	88
Drug Team	SHD	SHD		253	49	302	SHD	19	19	NCH	217	217
John Boren	RB	RB		SHD	80	80	40	61	101	BRK	--	
Todd Schwein										PRN		
Tom McCann	NG	NG		45	NDP	45	61	28	89	61	CA70	61
Mark Bundick												
Ric Gaff												
Bob Hart							38	36	74			
Tom Hoelle												
Tim Vaccaro										43	56	56

CONTESTANT	1/2A PARACHUTE DURATION			1/2A STREAMER DURATION			OPEN SPOT DISTANCE		SPORT SCALE				TOTAL POINTS
	1ST	2ND	TOTAL	1ST	2ND	TOTAL	FEET	INCHES	STATIC	FLIGHT	TOTAL	MODEL	
Don C. Linder	43	134	177	30	10	40	85	0	395	165	560	TITAN 11	1572
B.J. Tuleja	9	6	15	7	EJE	7	46	4.5					414
Tim Marcy	84	49	133	33	SEP	33	133	2	395	180	575	ASP	1110
Don L. Linder	86	114	200	54	45	99	82	10	510	180	690	SPACE SHU	1101
Dual Egglofters	82	363	445	SEP	SEP		19	5	700	190	890	SATURN 18	903
Larry London	86	92	178	30	25	55	85	10					489
Drug Team	59	NDP	59	50	46	96	27	3	715	170	885	AEROBEE 3	834
John Boren	94	15	109	EJE	NDP		78	1					465
Todd Schwein	EJE	58	58	33	UNS	33							30
Tom McCann	97	52	149	NDP	22	22	82	9					252
Mark Bundick							72	1					24
Ric Gaff							EJE						0
Bob Hart	76	22	98	16	18	34	150	10					108
Tom Hoelle				25	--	25			695	175	870	GENII MB1	147
Tim Vaccaro	28	NDP	28	16	12	28	84	11					57

model and in Sunday's winds got damage when the bird dragged along the ground. Two lost fins cost points, and Jedi finished second by 5 points out of almost 900. The DEL's landed safely in the grass.

When results were totaled, MWRC was a victory for the Linder clan. Don C. in A/B with 1176 points, and Don L. in C with

1110 points. Tim Marcy finished second in A/B, and the Dual Egglofters edged Jedi for runner-up honors in C. Among sections, host NIRA pulled down 5,439 points besting the second place independents by 4200 points.

MWRC served as good NARAM practice, and competitors found themselves with a good new field for contests. Hope to see you (maybe?) in October for ETR.

Name	Address	City	State	Zip	Phone	Member Since
Beach, Tom	Buchanan Hall #5172	ISU Ames	IA	50013	N	507/362-8211
Boren, John	842 Luther Ln	Chicago Hts	IL	60411	N	312/756-2042
Bundick, Mark	1523 Cleveland	Evanston	IL	60202	NP	312/475-5048
Carnay, Scott N.	3780 Winston Dr.	Hoffman Estates	IL	60195	N	312/359-8637
Dudek, Craig	1330 E. Rand Rd. #30	Des Plaines	IL	60016	N	312/827-0776
Dugan, Jon M.	600 E Euclid	Glen Ellyn	IL	60137	N	312/469-7292
Fennell, Michael J.	829 Central	Matteson	IL	60443	N	312/720-2256
Fountain, Robert B	23540 N Cedar Ln	Lake Zurich	IL	60047	N	312/438-7555
Frissema, Bill	178 N. Euclid Av.	Oak Park	IL	60302	N	312/848-3648
Gabrius, Al	346 Alabama	Carol Stream	IL	60188	N	312/653-7545
Gabrius, David	346 Alabama	Carol Stream	IL	60188	N	312/653-7545
Gabrius, Justin	346 Alabama	Carol Stream	IL	60188	N	312/653-7545
Gaff, Richard	331 Third St	Northfield	IL	60093	PN	312/724-2975
Glowienke, Gary	3456 N Hoyne	Chicago	IL	60618	N	312/929-7191
Glowienke, Gerry	3456 N Hoyne	Chicago	IL	60618	N	312/929-7191
Glowienke, Greg	3456 N Hoyne	Chicago	IL	60618	N	312/929-7191
Godron, F. Scott	476 Main St	Glen Ellyn	IL	60137	NP	312/469-2653
Guziak, Joyce	Buchanan Hall #4168	ISU Ames	IA	50013	N	312/7870-1217
Haugner, Jasper L.	718 McKinley	Arlington Hts.	IL	60005	N	312/870-1217
Haugner, Mike	718 McKinley	Arlington Hts.	IL	60005	N	312/870-1217
Heipp, Laura A.	152 Quail Run Ct. 1B	Carol Stream	IL	60188	N	312/653-8261
Heipp, Steven A.	152 Quail Run Ct. 1B	Carol Stream	IL	60188	N	312/653-8261
Heipp, William A. Jr.	1980 Lancaster #102	Wheaton	IL	60187	N	312/690-0677
Jones, Alan	1138 Briar Drive	Iowa City	IA	52240	N	319/338-7663
Kaplow, Robert G.	21W561 Mayfield Ct.	Glen Ellyn	IL	60137	N	312/469-2904
LaRoche, Scott	1628 Waterford Ln	Palatine	IL	60074	NGD	312/934-1160
Lentini, Tony	614 69th	Darien	IL	60559	N	312/969-3956
Levit, Dan	609 N Roberta	Northlake	IL	60164	N	312/455-7756
Levit, Jason	861 Fairfield	Elmhurst	IL	60126	N	312/941-7658
Linder, Don L.	861 Fairfield	Elmhurst	IL	60126	N	312/941-7658
Linder, Donald C.	600 W. Helen Rd.	Palatine	IL	60067	N	312/359-4341
London, Larry	600 W. Helen Rd.	Palatine	IL	60067	N	312/359-4341
Marcy, Tim	1795 Lake Cook Rd.#107	Highland Park	IL	60035	NP	312/831-5370
Maryniak, Gregg E.	714 N Stoddard	Wheaton	IL	60187	N	312/668-7156
Mika, Lawrence	404 Knoll Way	Rocky Hill	NJ	06517	NP	312/985-2156
Miller, Braxton	7905 Iroquois Ct.	Woodridge	IL	60517	NP	312/985-2156
Morris, Brad	P O Box 551	Morton Grove	IL	60053	NP	312/296-0250
Patrick, Thomas E.	925 North Ave.	Deerfield	IL	60015	N	312/945-4188
Peterson, Pat	8910A Robin Dr.	Des Plaines	IL	60016	N	312/470-0697
Ribesehl, George A Jr	608 W. Elm St.	Urbana	IL	61801	N	-
Ribesehl, George A Sr	513 Brockton Lane	Schaumburg	IL	60193	NP	312/894-4739
Roberto, Ben	513 Brockton Lane	Schaumburg	IL	60193	N	312/894-4739
Schmitt, Mark	17 Carla Ln	Scottsburg	IN	47170	N	312/752-3711
Schwarzkopf, Jerry	21W716 Buckingham Rd	Glen Ellyn	IL	60137	NP	312/469-9076
Smith, Robert W.	1036 Charing Cross	Lombard	IL	60148	N	312/629-6732
Tuleja, B J	4015 N. Whipple St.	Chicago	IL	60613	N	312/583-7588
Tuleja, Bill	117 Julie Rd	Bolingbrook	IL	60439	N	312/739-9180
Verdenz, Henry	117 Julie Rd	Bollingbrook	IL	60439	N	312/739-9180
Wakely, Mark	810 N Cuyler	Oak Park	IL	60302	N	312/386-6238
	1440 S. Oakland Av.	Villa Park	IL	60181	N	312/834-3398

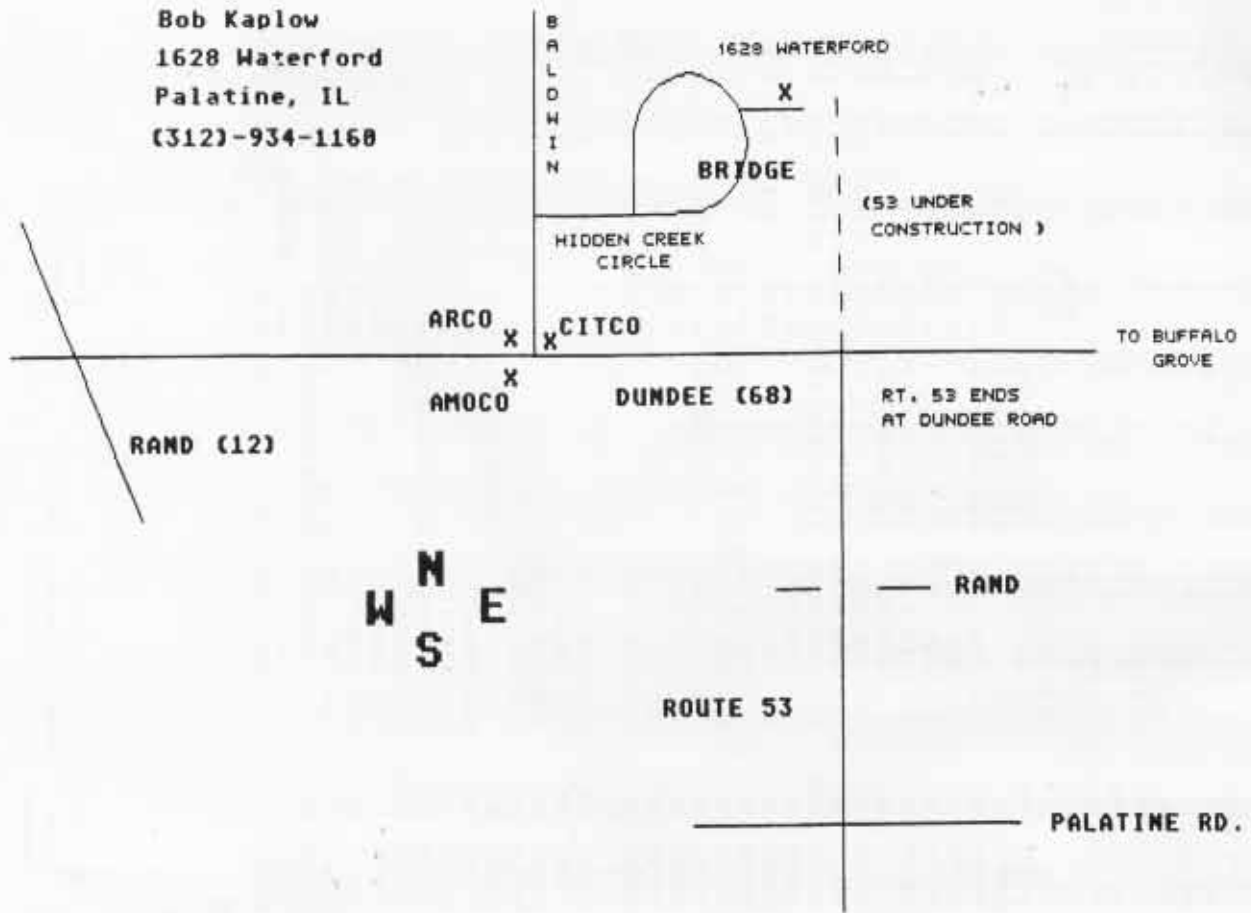
# N I R R A M E M B E R S H I P L I S T

Compiled by Bob Kaplow

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-	8607
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