

The 1938 National Air Races at Cleveland, Ohio



by Al Hansen

In 1924 Leigh Wade was one of the pilots who circumnavigated the globe in Douglas DWCs. Fourteen years later he finished fourth in the 1938 Thompson flying the military aircraft HM-1, a conversion of Frank Hawks' "Time Flies." (Photo from the AAHS Archives)

1938, the ninth year of the Great Depression saw some improvement in the U.S. and world economies. The unemployment rate of 20 percent in the U.S. would not change until the outbreak of war in 1941.

The National Air Races (NAR) were a short respite from the grinding depression. The event was a favorite and the Labor Day week each year was something to look forward to.

There were many rule changes in the NAR for 1938. The introduction of the Seversky civil P-35s in 1937 caused a complete shake-up of the rules. Most of the changes were aimed at curbing possible takeover by the advanced military aircraft like the civil P-35s that had done so well in both the Bendix and Thompson races the year before. In view of the \$35,000 cost of the civil versions of the military aircraft, the Thompson Race organizers felt they had to act immediately to keep their series alive for the low budget grassroots American racers with home-built planes.

The new 1938 rules stipulated a maximum engine size of 1860 cubic inches to keep any large future military engines out of the NAR. Qualifying was changed to two laps of the race course, with a minimum average of 225 mph with no more than 15 planes starting. The race was lengthened to 300 miles to encourage more practical planes with reliable engines. The

purse was nearly doubled to \$45,000. A key rule change was that no plane could compete in both the Bendix and Thompson races, though this did not apply to pilots. It was felt that this would give the big military a shot at one title but would prevent any domination of both series.



Jacqueline Cochran, the winner of the 1938 Bendix Race. (Wide World photo from the author's collection)

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1. Ms. Cochran's Seversky SEV-S2 that she flew to victory in 1938. She flew on to Bendix, N.J., to set a new women's west-east speed record. (Peter M. Bowers photo from the author's collection)
2. Frank Fuller was the second-place finisher in the Bendix Race with this Seversky SEV-S2. (Emil Strasser photo courtesy of Gerald Liang)
3. Lockheed "Orion," NR12222, flown by Paul Mantz, finished third in the cross-country Bendix Race. (UPI photo from the author's collection)
4. Max Constant was the fourth-place finisher in this Beech D-17W NR18562. (Emil Strasser photo courtesy of Gerald Liang)

The Bendix Trophy Race

Ten Bendix racers left Burbank, Calif., in the pre-dawn Saturday, September 3. Stormy weather was reported from Winslow, Ariz., all the way into St. Louis. Jacqueline Cochran in her civil version of the Seversky P-35 powered by a 1,200-hp P&W Twin Wasp, flew on top over the bad weather. She flew at 16,000 to 22,000 feet nonstop into Cleveland, winning the Bendix with a speed of 249.8 mph, 16 minutes slower than Frank Fuller's record of 1937. After a 15 minute stop for gas, she continued to Bendix, N.J., averaging 242.1 mph to set a new women's west-east record.

The second place finisher was Frank Fuller in his civil Seversky P-35 with an average speed of 238.6 mph for 2,043 miles, including a gas stop at Wichita, Kansas.

Paul Mantz in his 750-hp Wright Cyclone-powered Lockheed Orion flew into Cleveland in third place at 206.6 mph. Mantz had an encounter with a bird at 14,000 ft. that slowed him. He landed with a hole in the leading edge of the wing and a bird wedged in the trailing edge.

Fourth place was claimed by Max Constant in a Beech Staggerwing, while Ross Hadley followed in fifth in another Staggerwing. Charles La Jatte was sixth and last in a Spartan 7W "Executive." The other four Bendix contestants were forced out of the race by various mechanical problems.



Bendix Race Results

2,043 miles - Burbank, Calif., to Cleveland, Ohio

Pilot	Race No.	License No.	Aircraft	Engine	HP	Time	Speed (mph)
Jacqueline Cochran	13	NX1384	Seversky SEV-S2	P&W Twin Wasp	1200	8:10:31*	249.744
Frank Fuller Jr.	77	R70Y	Seversky SEV-S2	P&W Twin Wasp	1200	8:33:29	238.604
Paul Mantz	23	NR12222	Lockheed Orion	Wright Cyclone	750	9:36:25	206.579
Max Constant	31	R18562	Beechcraft D-17S	P&W Wasp Jr.	450	10:14:39	199.330

**Jackie Cochran continued to Bendix, N.J., to set a new women's west-east speed record.*

The Greve Trophy Race

The Greve Trophy race for 1938 was flown over a 30 lap 300-mile course. The hot contest between Tony LeVier in his 1936 Keith Rider "Firecracker" and Art Chester in his new and sleek "Goon" racer lead the other four contestants by a wide margin. LeVier and Chester exchanged leads several times and lapped the other four planes. On lap 15, Chester cut No. 2 pylon because of an oil covered windshield. Chester recircled the pylon giving LeVier a lead of almost half a lap. LeVier thought Chester was finished and out of the race. He throttled back and Chester pushed his throttle to the firewall. In the next three laps Chester closed the gap while loosing oil as he pushed LeVier. On the 18th lap Chester was clocked at 278.3 mph. Near the end of lap 19 LeVier spotted Chester again on his tail and also opened up, turning his 20th lap at 269.6 mph to win the Greve Trophy with an average of 250.9 mph, besting the 1936 record.

Art Chester at 250.4 mph finished second, just seconds behind LeVier. Joe Jacobson racing a new Keith Rider all-ply-wood "Eight Ball" was a slow third at 218.3 mph. Earl Ortman finished fourth averaging 192.5 mph in his Marcoux-Bromberg "Jackrabbitt," a reworked 1936 sister ship to LeVier's Rider.

Harry Crosby flying his new Crosby CR-4, the only all-metal plane in the Greve, lost his exhaust manifold early in the race and landed safely with his ship on fire after his 14th lap. During his air racing career, Harry Crosby seemed to have endless bad luck.



Art Chester with his wife and son and new racer at the National Air Races in 1938. (Photo by Emil Strasser courtesy of Gerald Liang)

Greve Trophy Race Results

30 laps, 300 miles

Place	Pilot	Race No.	License No.	Aircraft	Engine	Speed (mph)
1	Tony LeVier	70	NX261Y	Schoenfeldt-Rider R-4	Menasco CS-4	250.886
2	Art Chester	5	NX93Y	Chester "Goon"	Menasco CS-4	250.416*
3	Joe Jacobson	8	NX96Y	Rider R-6 "Eight Ball"	Menasco CS-4	218.278
4	Earl Ortman	22	NX264Y	Marco-Bromberg Rider R-5	Menasco B-6S	192.503**

**Chester did 278.3 mph in the 18th lap.*

***Ortman flagged out of the race in the 18th lap.*



1. Art Chester was the second-place finisher in his new racer he called "Goon." The racer was equipped with a French Ratier propeller that threw oil all over the windshield and probably cost Art the win in the Greve Race. (Emil Strasser photo courtesy of Gerald Liang)

2. Tony LeVier won the Greve Trophy in a Schoenfeldt-Rider R-4 racer. He landed down-wind finishing the Greve and damaged his racer which kept him out of the Thompson Trophy Race. (UPI photo from the author's collection)

3. Art Chester, his racer the "Goon" and the Ratier propeller that gave him all the trouble. (UPI photo from the author's collection)

4. Harry Crosby's all-metal CR-4 racer that was forced out of the Greve Trophy Race by an exhaust manifold that fell off the plane early in the race. Crosby landed safely on his 14th lap with the plane on fire. (UPI photo from the author's collection)

5. This Keith Rider R-6 "Eight Ball" was raced by Joe Jacobson to third place. (Photo from the author's collection)





The Keith Rider R-3 was highly modified in 1937 by the new owners Marcoux and Bromberg. The modifications included a new wing, new engine and propeller, a new cowling and other changes. Ortman raced this aircraft at the NAR Thompson Trophy competition in 1936, 1937 and 1938 and finished second each time. (Photo by Bill Yager from the Strasser collection courtesy of Gerald Liang)

The Thompson Trophy Race

The main attraction of the National Air Races was the race for the Thompson Trophy. For 1938 the race was 300 miles, 30 laps over a 10 mile race course. Eight aircraft made up the field of contenders. Roscoe Turner's Laird Turner "Meteor" had improvements that upped its speed 20-30 mph. Earl Ortman was back in the Marcoux-Bromberg Special that also had some changes plus was using the first general availability of 100 octane gasoline. Steve Wittman had made more cooling system changes on his racer "Bonzo," the Granvilles had bought back Frank Hawkes' "Time Flies" and rebuilt it as a two-seat military prototype, the HM-1 that was entered with Leigh Wade piloting. Joe Mackey was back again racing the ageless Wedell Turner racer and Harry Crosby was back with a stronger Menasco C6S-4 engine.

Art Chester introduced his new tiny racer he named "Goon" powered by a highly modified Menasco C6S-4 engine and French Ratier two-pitch propeller. Tony LeVier made a very rough landing after winning the Greve the day before and the damage kept him out of the Thompson competition. Race pilot Joe Jacobson flew Keith Rider's latest all-plywood R-6.

The race started with Ortman, Wittman and Chester leading into the first lap in that order. Roscoe Turner took off easy and was very careful around the scatter pylon, he applied more power down the long west straightaway. He caught up with the front runners on the second lap then eased back, letting Ortman set the pace in the 270 mph bracket. On lap six Ortman cut a pylon and Turner took the lead when he turned back to recircle it. The order was then Turner, Ortman, Wittman and Chester. But Wittman and Chester were both in trouble: Wittman was losing coolant and Chester blowing oil out its engine breather

vents. On the 13th lap Ortman began trailing smoke. By the 16th lap, Chester had slipped back to sixth place. But Ortman and Wittman held on doggedly to second and third, even though they fell back gradually behind Turner, who was lapping easily in the 280 mph bracket. Finally on lap 20, Chester



Roscoe Turner told Fred C. Crawford how he won the Thompson Trophy on September 5 at Cleveland, setting a new speed record, his waxed mustache bristled as though he had been sitting in the stands at ease all afternoon. "I was scared" he explained, "because I was afraid I'd pull off a wing." Crawford was president of the company that awards the Thompson Trophy in the National Air Races. (Wide World photo from the author's collection)

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Thompson Trophy Race Results

30 laps, 300 miles

Place	Pilot	Race No.	License No.	Aircraft	Engine	HP	Speed (mph)
1	Roscoe Turner	29	R263Y	Laird-Turner "Meteor"	P&W R-1830	1100	283.419
2	Earl Ortman	3	NR14215	Marcoux-Bromberg	P&W R-1535	900	269.718
3	Steve Wittman	2	NR13688	Wittman "Bonzo"	Curtiss D-12, 1145	485	259.187
4	Lee Wade	41	NX2491	Military Aircraft HM-1	P&W R-1830	900	249.842
5	Joe Mackey	25	NX61Y	Wedell-Williams	P&W Hornet R-1690	1000	249.628
6 *	Joe Jacobson	18	NX96Y	Rider R-6 "Eight Ball"	Menasco C-6S4, 544	400	214.570

* DNF, Out on Lap 27

had to come down – out of oil. Shortly after, Ortman was lapped by Turner and finally, on Ortman's 27th lap, an oil line broke and his pressure went to zero, spraying oil all over the fuselage and canopy. Ortman hung on, hoping against hope to finish the 30 laps before his oil supply was gone entirely. He just made it, finishing second at 269.7 mph to Turner's winning 283.4 mph. Ortman's oil tank was empty when he landed. Wittman hung on too, despite a dwindling coolant supply, and was fortunate to finish third at 259.2 mph. Leigh Wade passed Mackey on the last lap to take fourth place. Joe Jacobson was flagged down on his 27th lap in the Rider R-6, far behind the pace. Luckless Harry Crosby was overcome by gas fumes and landed on his tenth lap.

Roscoe Turner, resplendent in his powder-blue uniform, became the only two time Thompson Trophy winner and it was Earl Ortman's third consecutive second place finish in the Thompson.

1. Roscoe Turner won the Thompson Trophy Race in his Laird-Turner "Meteor" powered by a P&W "Twin Wasp" Senior, 1,830 cubic inch, 1,250-hp engine. (Peter M. Bowers photo from the author's collection)
2. Earl Ortman raced the Marcoux-Bromberg Special to second place in the Thompson. The Marcoux-Bromberg was powered by a P&W Twin Wasp Jr. 1535 cu. in., 900-hp engine. (Emil Strasser photo courtesy of Gerald Liang)
3. Steve Wittman raced his strange looking racer he named "Bonzo," racing no. 2, NR13688, to third place in the Thompson Trophy. By 1938 Wittman was one of the veteran race pilots. Bad luck kept him out of the winners circle in 1937, the Curtiss D-12 engine still had cooling problems in 1938. (Photo by Emil Strasser courtesy of Gerald Liang)

