

REFLECTIONS on the 1948 NATIONAL AIR RACES

Part One – Transcontinental Racing

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Figure 1

Panoramic view of 1948 N. A. R. showing the landscaped promenade and official's review stand. Photograph was taken during fly-by of U. S. Navy's Martin JRM-2 "Caroline Mars" (Bu. No. 76824) from VR-2 Squadron, Alameda N. A. S. (Photo—K. Sherman via C. Mandrake)

Twenty years ago, the colorful sport of air racing was once again in full bloom. After a six year lull imposed by World War II, the National Air Races were resumed in 1946 at the Cleveland Municipal Airport. By the time the 1948 races took place, the number and variety of events, contests, demonstrations and displays had reached crowd-pleasing dimensions (Figure 1). In addition, military participation in the form of races, aerobatics and equipment demonstrations amounted to a significant portion of the total program.

The annual September classic was indeed "big business" for the city of Cleveland, Ohio, and enjoyed national stature in the eyes of the industry, commercial and general aviation interests. The events were held over the Labor Day weekend (September 4, 5 and 6). Management, sponsorship, and direction of the three day program in-

cluded some of the most prominent business and general aviation named of that era.¹

The National Air Races were comprised of various types and categories of events. Because of the diversity, this review is restricted to a brief summary of some of the interesting—and perhaps lesser known facets—of the unlimited class racing aircraft participating in the cross-country competition.*

There were two transcontinental races and one inter-city dash in the 1948 program of events.² Both divisions of the Bendix Trophy Race** were held on Saturday, 4 September 1948. The aircraft departed Long Beach,

* Both reciprocating and jet engined racing aircraft competing in their respective events.

** Sponsored by the Bendix Aviation Corporation.

TABLE A - List of Entries
1948 Bendix Race, "R" Division

Place	Pilot	Race No	License No	Aircraft	Elapsed Time	Speed mph	Remarks
1	Paul A. Mantz	46	NX 1204	P-51C-10-NT	4:33: 48.7	447.980	Third consecutive Bendix Victory for Paul Mantz
2	Linton B. Carney	60	NX 1202	P-51C-10-NT	4:34: 57.5	446.112	
3	Jacqueline Cochran	13	NX 28388	P-51B	4:35: 07.3	445.847	
4	Edmund P. Lunken	33	N 61151	P-51D-30	4:37: 46.3	441.594	
5	Jesse F. Stallings	81	N 66313	Mosquito Mk 25	5:59: 35.2	341.120	Fuel system difficulties
	Joe DeBona	90	N 5528N	P-51C			Did not finish, Exhausted fuel supply.
	Jane Page	42	NX 4477N	P-47M-1			
	Diana C. Cyrus			Mosquito Mk 25			Withdrew from race*
	Donald E. Bussart			Mosquito Mk 25			Did not start, reason unknown
	E. M. McVicar	41	CF-FZG	Mosquito Mk 25			Withdrew. Engine trouble at Wichita, Kansas, enroute to starting lineup
	Jack Becker	74		P-38			Withdrew. Forced down at New Orleans enroute to starting lineup**

* The reason for Miss Cyrus' withdrawal from the Bendix may well have been due to her planned "round-the-world" flight scheduled for take-off between 20 and 25 August, 1948.¹¹

** The aircraft flown by Jack Becker may have been Herman Salmon's entry in the 1946 Bendix. Salmon's aircraft carried the same race number (74) and was listed by H. S. Gann¹² as an F-5G, License No. NX 56687.

California and negotiated the 2045 mile cross-country route to Cleveland, Ohio. The third cross-country dash in 1948 was the Allison Jet Trophy Race* from Indianapolis, Indiana, to Cleveland.

The most significant characteristic of unlimited class racing in 1948 was the relatively few aircraft that managed to complete each event. The Bendix was no exception (Table I). In August, it was reported that 11 entries would participate in the reciprocating engine class ("R" Division) of the Bendix.³ On 15 August, a landing accident apparently knocked one of the entrants out of the race. Jane Page was ferrying a P-47M-1** from Dallas, Texas to Burbank, California, in preparation for the race. Enroute, Miss Page set the P-47 down at Amarillo, Texas. Upon landing, one of the tires on the main gear sustained a blowout.⁴ Although damage to the aircraft was not stated in the news releases, it is presumed that this accident may have contributed to the absence of this aircraft from the starting lineup on September 4.

As the time for the Bendix race approached, Diana Cyrus announced her intention of withdrawing from the

list of starters.⁵ Similarly, Donald E. Bussart did not compete with his De Havilland Mosquito.*** Two additional racers were removed from the entry list.⁶ E. M. McVicar of Montreal, Canada, withdrew with a broken connecting rod in one of the Merlin engines of his MK25 Mosquito at Wichita, Kansas (enroute to California). While on a flight West from Jacksonville, Florida, Jack Becker's P-38 developed trouble in New Orleans and he was unable to make the starting lineup. Thus, the entries in the reciprocating division of the Bendix were reduced to only six aircraft.

* Sponsored by Allison Division, General Motors Corporation. All jet cross-country dash originating at Weir Cook Airport in Indianapolis and ending at Cleveland Municipal Airport.

** This was the "Reynolds Bombshell" flown by Bill Odom (NX4477M).

*** The reason for Bussart's withdrawal was not determined.



Jesse F. Stalling's DeHavilland MK-25 Mosquito pictured at Cleveland following the 1948 Bendix Race. (Photo—Emil Strasser)

Figure 2

From the six starting aircraft in the "R" Division of the Bendix, only four planes were ultimately in serious contention. The fifth airplane, J. F. Stalling's De Havilland MK25 Mosquito (Figure 2), landed at Cleveland with an elapsed time in excess of one hour more than the fourth place winner (Table A). Fuel system difficulties plagued the Mosquito and accounted for its relatively low average speed of 341.1 mph.⁷

Figure 3 shows Joe DeBona's P-51C just starting its takeoff roll (10:12:30 a.m., local time) from Long Beach Airport. The hazy background in this photograph attests to the heavy ground haze and fog which delayed the start of the 1948 Bendix for approximately two hours.⁸ The fourth pilot to depart Long Beach,⁹ DeBona was destined to be eliminated from the race when his fuel supply became exhausted in the vicinity of Elyria, Ohio.*

The P-51C flown by Joe DeBona was exceptionally clean. The 1948 configuration is discernable by the odd-shaped antenna housing which extended the contour of the verticle fin above the top surface of the rudder (Figure 3).

The eventual winner of the 1948 Bendix race ("R" Division) was Paul A. Mantz flying the P-51C-10-NT aircraft shown in Figure 4. Mantz, flying under the grey-green colors of hotel owner Glenn McCarthy, is generally credited with making the first "wet wing" (fuel) installation in a Mustang for transcontinental racing.¹⁰

Perhaps the most interesting entrant in the "R" Division was E. P. Lunken's modified P-51D-30 Mustang. Ed Lunken, like Paul Mantz, was a member of a three-plane team of racing pilots sponsored by Glenn McCarthy.** Figure 5 illustrates the modified cockpit arrangement of Lunken's "D" model Mustang. The design featured a drastically lowered windscreen and one-piece acrylic canopy and hatch assembly. To maintain streamline flow aft of the lowered canopy, a fairing was builtup to blend the canopy contour to the fuselage producing a profile

similar to the P-51B and C model Mustangs. Thus altered, the fuselage was finished to an extremely smooth external contour and surface.

A relatively short description of the 1948 Bendix Race ("R" Division) is given by Dwiggins,¹³ while Kinent¹⁴ provides but brief mention of the event. In the same vein, Christy presents only a thumbnail sketch of the Bendix in Reference 15. Various newspaper accounts offer little more in the way of detail concerning the actual flight. An in-depth account of the aircraft technical modifications and innovations of the piston engine Bendix racers is clearly absent in the literature. Comprehensive information about the pilots and their experiences in preparing for and participating in the Bendix has received somewhat more attention. However, this facet of cross-country racing history in the late 1940's is also in need of systematic and detailed study.

* Approximately 30 miles west of the Cleveland airport.

** The third member of this team was Linton B. Carney flying NX1202, race number 60.



Joe DeBona's blue P-51C (N5528N) beginning its take-off from Long Beach Airport. (Photo—Dustin W. Carter)

Figure 3

TABLE B - List of Entries 1948 Jet Aircraft Cross-Country Trophy Races

<u>BENDIX RACE - "J" Division</u> ^(A)							
Place	Pilot	Race No. ^(B)	Aircraft ^(C)	Bu. No.	Departure Time	Elapsed Time	Average Speed (mph)
1	Ens. F. E. Brown	116	FJ-1		10:58:55	4:10:34.4	489.526
2	Cdr. E. P. Aurand (D)	101	FJ-1	120350	10:29:30	4:13:04.9	484.674
3	Lt. E. R. Hanks	119	FJ-1		11:03:15	4:15:53.3	479.358
4	Ens. R. E. Oechslin	120	FJ-1		11:14:00	4:20:44.4	470.439
-	Lt. Cdr. R. M. Elder (E)	117	FJ-1		11:20:00	-	-
-	Lt. A. T. Capriotti (E)	107	FJ-1		11:08:45	-	-
-	Ens. C. Piorozzi (G)	113	FJ-1		Unknown		
-	Maj. R. De Haven (H)	-	P-80C-1-LO	47-181	"	4:09:30.0	
-	Capt. R. Love (I)	-	P-80C-1-LO	47-178	"	-	-

ALLISON TROPHY RACE

1	Lt. L. B. Thompson, Jr.	116	FJ-1			31:47.1	490.703
2	Lt. A. E. Nauman	120	FJ-1			33:46.4	461.814
3	Lt. Cdr. A. E. Conner	111	FJ-1			33:59.1	458.938
-	Ens. C. Piorozzi (J)	113	FJ-1			-	-

NOTES:

- (A) Official entries in "J" Division of Bendix limited to U. S. Navy aircraft. All Navy aircraft in both Bendix and Allison races were from VF-51 Squadron.
- (B) Aircraft squadron marking (fuselage side number).
- (C) The FJ-1's carried a full load of ammunition on transcontinental flight.
- (D) VF-51 Squadron C.O.
- (E) Flame out upon landing, did not cross finish line.
- (F) Forced landing at Tiffin, Ohio.
- (G) Spare aircraft. Also intended for Allison race.
- (H) Unofficial entry from California A.N.G.
- (I) Developed engine trouble near Indianapolis and arrived in Cleveland much later. Unofficial entry from California A.N.G.
- (J) Failed to take off.



Figure 4. Paul Mantz entry in the 1948 Bendix. Aircraft is a P-51C-10-NT (AAF 42-103831) modified to incorporate a "wet wing" for long range nonstop transcontinental flying. (Photo — Charles Mandrake collection)



Figure 5. E. P. Lunken's P-51D-30 in Glenn McCarthy's racing colors. Note the modified canopy and aft fuselage section. (R. T. O'Dell)



Figure 6. FJ-1 Fury on takeoff roll from Long Beach, in 1948 Bendix Race ("J" Division). Piloted by Lt. A. T. Capriotti, the aircraft was forced down at Tiffin, Ohio, by pilot encountered difficulties with his oxygen system and subsequently depleted the fuel supply. (D. W. Carter)



Figure 7. Ensign Piorozzi in Fury 113 was to be a spare. Not officially in the Bendix Race, but in the Allison Race; it did not take off in either. (H. W. Arnold)



*Both P-80C-1-LO aircraft were Bendix participants. Capt. R. Love flew 47-178, and Major R. DeHaven piloted 47-181
(Photos-Harry S. Gann)*



In contrast to the lack of definitive information concerning reciprocating engine racers in the 1948 Bendix, the jet aircraft contestants ("J" Division) have received somewhat better recognition and documentation. Entrants in the 1948 "J" Division of the Bendix were comprised of members of Navy Squadron VF-51 flying North American FJ-1 Furies.¹⁶ An interesting account of the preparation and flight experiences of participating VF-51 pilots is described by Dwiggins.¹⁷ A description of the race will not be recounted here. Of interest, however, are some of the statistical details regarding the Bendix FJ-1's summarized in Table B. The information for this tabulation was gathered from several sources.^{9, 18, 19, 20}

Figure 6 is a photograph of Navy Lt. Anthony T. Capriotti's FJ-1 beginning his takeoff in the 1948 Bendix jet division. This particular Fury was forced down at

Tiffin, Ohio, and did not complete the race. The photograph in Figure 7 shows another FJ-1 (aircraft side number 113) during takeoff from Long Beach airport. This aircraft was not officially entered in the Bendix, but served as a spare.²¹ Official "Results of the 1948 National Air Races" list Fury number 113 as an entrant in the Allison Jet Trophy Race. According to this same document, however, the aircraft failed to take off in the Allison event. It is not known whether Fury number 113 departed Long Beach for Cleveland or flew directly to Indianapolis to compete in the Allison Race.*

* The Allison Trophy Race was held on 5 September 1948—the day following the Bendix "J" Division.

It is probable that Fury 113, piloted by Ensign Constantine Piorozzi, continued on to Cleveland and was subsequently ferried to Indianapolis. In any event, this aircraft failed to compete for the Allison Trophy.* This resulted in a three-plane contest won by Fury No. 116. Interestingly, Fury 116 (piloted by L. B. Thompson, Jr.) was the same aircraft that captured the Bendix Jet race. This aircraft and another Bendix contender—Fury number 120—were also ferried to Indianapolis to compete in the Allison race.

Inter-service rivalries were increasingly sharp in the late forties. It had been proposed that the Bendix "J" Division include both Air Force and Navy participants.⁵ In anticipation, two California Air National Guard aircraft were sitting "on-line" when VF-51 squadron arrived at Long Beach prior to the race. Permission for the California A.N.G. P-80C-1 aircraft to compete was ultimately refused when the request reached Washington.²² Unofficially, both P-80C's flew the Long Beach to Cleveland course. Major Robert De Haven claimed an (unofficial) elapsed time of 4 hours, 9 minutes and 30 seconds; approximately one minute less than the time of the winning Navy jet.

Race officials refused to record De Haven's time and (if accurate) this record never entered the official statistics. Major De Haven's companion in the transcontinental flight was Captain Robert Love. Captain Love's aircraft developed mechanical problems and arrived in Cleveland very late. Photographs of the two "unofficial" Bendix participants are shown in Figure 8 and 9.

With the passing of two decades, the art and science of unlimited class transcontinental air racing has changed very little. For the most part, the participating piston engine aircraft are the same types used in the late forties. North American's venerable Mustang still dominates the transcontinental events. An exception to this trend was Mike Carroll's victory in the 1967 transcontinental race flying a Hawker Sea Fury.

* Data on the Allison Trophy Race is included in Table B.

Basically, the piston engine craft used for racing were already highly developed and refined designs capable of high performance. Modifications wrought to these aircraft for long distance racing have been for the most part, minor in nature. Major structural redesign and development would seem to be financially out of reach. A period of 20 years, therefore, has produced very little change in the sport of cross-country racing. Unfortunately, the most significant difference today is the complete absence of military participation in such events. The stature and color of air racing would be enhanced by a return of military aircraft competition.

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