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# 2004



## AIRVENTURECUP





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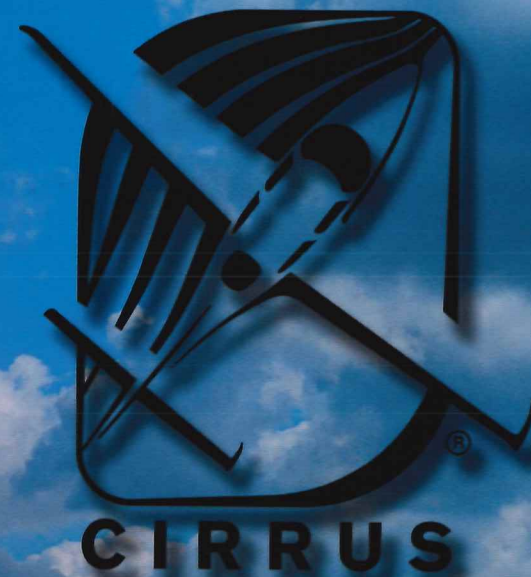
# Thanks to our Sponsors

The EAA AirVenture Cup Race is Brought to you by:



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Official Chase Plane of the EAA AirVenture Cup Race:



# Acknowledgements

This race would not be possible if not for the cooperation and support of the following people and agencies!

## 2004 AirVenture Cup Race

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Erik Anderson  
Sarah Whyte  
Ken Whyte  
Tim Bass  
Joe Coraggio  
Bob Whitehouse  
Mike Felske  
John Thorn

### Commander Aero, Dayton

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Gary Kromer  
Scherry Diamond  
Leslie Kromer  
Jason Vaughen  
Bill Sexton  
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Don Hurle  
Mike Erb  
Glen Sweezy  
Andy Jaskie

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Chicago Approach  
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Bob Lang  
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John Thorn  
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Joe Coraggio

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Dave Carmona

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Dayton Convention & Visitors  
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Carmen Huffman

Sterling Rock Falls Judges  
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Rich Polaski



July 2004

### Greetings!

I would like to welcome you as a participant in EAA's AirVenture Cup Race. I am sure that you will find it an enjoyable and exciting experience, and a great way to arrive to "Oshkosh."

I would like to express special thanks to all involved in the coordination and operation of this wonderful event. This year, the AirVenture Cup Race will help EAA launch the second century of flight. Innovation and experimentation have been an important part of EAA's history. Those attributes are showcased each year in the AirVenture Cup Race.

Regards,

A handwritten signature in black ink, appearing to read 'Tom'.

Tom Poberezny  
EAA President and Convention Chairman

# AIR VENTURE CUP

## Participants, Volunteers and Race Fans:

Welcome to the 2004 EAA AirVenture Cup Speed Dash! Whether you are a race veteran, a first time participant, volunteer or race fan, I thank you for being part of this year's race.

The 2004 Race is both a beginning and an end. It is the first time that the AirVenture Cup has planned to start anywhere other than Kitty Hawk, North Carolina. We will miss our friends in the Outer Banks and thank them for the fantastic memories of the first 6 AirVenture Cup events.

This year we are moving to Dayton, a city with strong aviation ties, and a history with this race. In 1999 we stopped at Dayton Wright Brothers Airport due to weather and Commander Aero rolled out the red carpet for us during our stay. We have been coming back since. I am thankful for their support as we have moved the starting line to their home airport this year. Special thanks to Dennis D'Angelo and the members of EAA Chapter 48 for all their help.

2004 also brings changes to the race course, for the first time we have two turn pylons on the Dayton to Wisconsin leg. We will be flying past the Whiteside County airport in Sterling, IL and on to Rockford, IL, the former home to the EAA Convention. We welcome everyone at both of those locations and thank them for their help.

Along with the changes to the race course this year is a new location for the finish line. Since the race began in 1998, we had been using Wendt's Marina on Lake Winnebago in Oshkosh as the finish line. Logistical problems have forced us to move to Lomira, WI and the private airport owned by the Quad Graphics Corporation. The race committee is grateful to the people at Quad Graphics that helped out this year who have allowed us to use their facility.

I would like to take a moment to thank everyone who has been a part of this race for the past 7 years. This year has been an especially up hill struggle. With out the help of a very dedicated race staff this event would not have happened. To the participants who keep coming back, you guys are crazy, but I do appreciate it, all of you have helped to write a unique part in aviation history. I am glad to have had the chance to be a part of it.

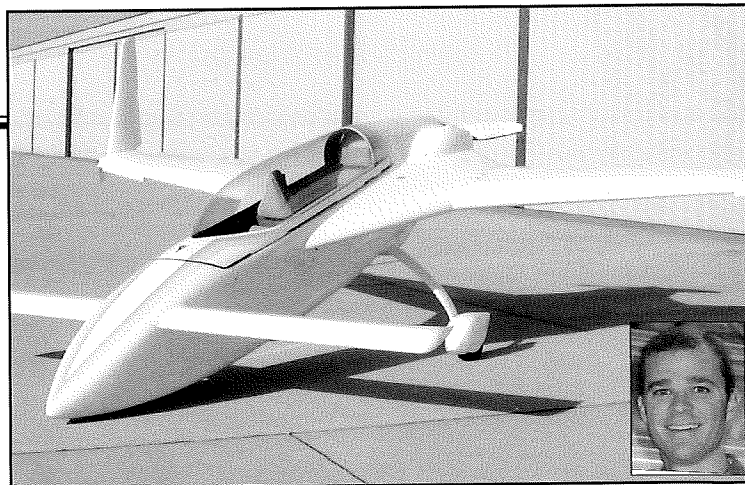
Enjoy the Race!



Eric Whyte  
Chairman, 2004 AirVenture Cup Speed Dash

52	Glasair II	Don Saint	230.82
73	Glasair TD	Steve Hammer	230.17
91	Glasair TD	Bruce Hammer	225.50
83	Cozy Mark IV	Marc Zeitlin	190.77
49	Christen Eagle	Pete Zaccagnino	115.16
<b>Formula FX - Blue</b>			
75	Glasair TD	Chuck Haataja	205.72
76	Long Ez	Jay Blum	204.23
93	Long Ez	Rich Lamb	196.96
82	Long Ez	Bob Wilson	190.41
45	Long Ez	David Orr	190.40
59	Long Ez	Lynn Crawford	184.09
15	Cozy	Timi Freeze	182.59
46	Long Ez	Elwood Johnson	180.92
85	Cozy Mark IV	Kevin Funk	179.45
65	Cozy	Jorgen Skovbjerg	178.27
86	Sidewinder	Dave Beismeier	175.68
62	Vari Ez	Tim LoDolce	171.01
69	Long Ez	Art Armani	164.04
99	Long Ez	Kerry Fritz	160.58
25	Speed Canard	Jack Watson	156.77
16	Speed Canard	Mike McEvoy	141.75
19	Vari Ez	William Oertel	84.85
<b>Sprint Class</b>			
66	Vari Ez	Rob Martinson	205.49
92	Vari Ez	Gary Hunter	189.22
81	Vari Ez	John Lambert	186.06
22	Q-200	Sam Hoskins	182.53
42	Long Ez	Larry Pollack	179.55
97	Long Ez	John Fisher	179.22
20	Vari Ez	Frank Pullano	164.47
90	Vari Ez	Edward Masterson	156.46
37	Long Ez	Tim Swift	155.38
24	Long Ez	Edgar Flaig	152.26
29	Long Ez	Nick Ugolini	149.06
41	Long Ez	Herb Rutter	144.01
<b>Formula RV - Blue</b>			
28	RV-8	Jeff Ludwig	201.73
56	RV-8	Scott Jordan	192.07
23	RV-8	John Bunn	192.95
55	RV-6A	James Norman	190.28
71	RV-6A	Bill Shannon	179.90
76	RV-6A	Wayne Williams	160.15
87	RV-8A	E. Len Leggette	159.84
<b>Formula RV - Red</b>			
74	RV-4	Scott Spencer	182.43
70	RV-4	Claudio Tonnini	178.94
48	RV-6	Dave Weisgerber	177.94
72	RV-4	Bobbi Boucher	176.99
53	RV-6A	Scott Gesele	174.47
63	RV-3	Bob Vasey	172.97
67	RV-6A	Larry Klusmier	168.96
58	RV-8	Alan Kritzman	166.60
34	RV-4	Chris Murphy	166.60
27	RV-6	Charles Calivas	156.37
<b>Golden Age</b>			
47	Twin Navion	Gay Hamilton	155.48
96	Bellanca CH-300	Colin Clarke	107.69

Race #88 is a white with yellow trim Vari-EZ owned and operated by Britton Shaw of Fort Smith, Arkansas. This plane was built by Don Shaw and was completed in 1981. N42DS won the coveted Rutan Outstanding Workmanship Award in 1982. N42DS has kept most its stock airframe features but boasts a beautiful long nose addition. Recently N42DS received an extensive upgrade to include starter, alternator, electronic ignition, performance exhaust, prop extension, and instrument panel complete with all new instruments. It is also has a throttle control for the back seat driver. N42DS/ Race 88 has accumulated more than 1,000 hours of flight.



Vari Ez

Flying Race #88 is Britton Shaw. Britton is a Personnel & Training Supervisor for MACSTEEL. Currently and for the past 14 years, he has served as a part-time Safety Manager for the Arkansas Air National Guard (F-16 Unit). Britton made his first flight in a Cessna 310 in the fall of 1986 and earned his Private Pilot Certificate a few years later. By the end of 1994, he had logged more than 850 hours in 14 different types of aircraft and graduated with a B.S. degree in Aviation from Southeastern Oklahoma State University. To date, he has logged more than 1,270 hours in 23 different type aircraft. This will be Britton's first

race. Britton says that after watching Frank Pullano's video, he knew he wanted to experience the AirVenture Cup Race from the first person point of view. So, his participation in this race is for the thrill and excitement, but most of all, for the camaraderie with fellow race pilots.

Britton is also very thankful for his wife, Rebecca, and her patience and interest with his aviation hobby. Since their first child's birth last year, they have begun a search for another airplane, with more seats!

<b>Top Speed:</b> .....205 MPH	<b>Engine:</b> .....Continental O-200
<b>Range:</b> .....900 Miles	<b>Displacement:</b> .....200 Cu. Inches
<b>Fuel Capacity:</b> .....25 Gallons	<b>Horsepower:</b> .....100
	<b>Empty Weight:</b> .....712 Lbs.
	<b>Gross Weight:</b> .....1,162 Lbs.



July 2004

To: EAA AirVenture Cup Race Participants

Commander Aero is most pleased to serve as your host for the start of your race to Oshkosh. We welcome you and consider your visit the highlight of our year.

There is much to see here at the home of the Wright Brothers and only wish there would be more time to show you the sights. As aviation enthusiasts you will want to see the enlarged Air Force Museum and Huffman Prairie where the Wright brothers actually developed the airplane. This treasured piece of land is part of WPAFB. We also have a new National Park in Dayton which has preserved the neighborhood of the Wright Brothers including their home site and bicycle shop.

We hope you will come back and spend more time with us. We would like to help you arrange your visit. Please give me a call at 888-881-5580.

Sincerely,

John A. Bosch, President

# 2003 Race Results

## Unlimited

44	Lancair IV-P	Bob Wolstenholme	253.91
89	Flyin' Tiger	Bruce Bohannon	228.57
64	Lancair Columbia 400	Keith Vasey	225.09
12	Pitts Model 12	Mike Phillips	138.95

## Sport Class

5	Lancair Legacy	Lee Behel	290.69
10	SX-300	Keith Phillips	270.42
39	Berkut 540	Charles Bracken	257.98
30	Berkut 540	Michael Kasyan	238.68
84	F1 Rocket	Mark Frederick	217.55
43	Velocity XLRG	John Cargill	185.56
21	Defiant	Harry Manvel	173.40

## Sea Sport Class

60	Seawind 3000	Art Culber	168.88
50	Seawind 3000	George Osborne	167.14
90	Seawind 3000	Keith Walljasper	159.89

## Formula RG

31	Polen Special II	Dick Keyt	260.93
36	Lancair 360	Larry Henney	226.45
77	Lancair 360	Mark Ravinski	224.69
94	Lancair 320	Scott Krueger	220.23
38	Berkut 360	John Danials	218.48
35	Lancair 360	Ernie Chauvin	206.44
17	Lancair 360	Donald Smith	204.42
32	Glasair I RG	Ernie "Skip" Gdisis	166.96
26	White Lightning	Peter Huff	DNF

Dayton - Wright Brothers Airport

10570 Springboro Pike Miamisburg, Ohio 45342

Phone 888-881-5580 937-885-5580 Fax 937-885-5586

Web commander-aero.com email service@commander-aero.com

# The AirVenture Cup

The 2004 EAA AirVenture Cup Race is being flown to unite aviation's rich history with its promising future. The race course brings together aviation's most historic places, from the home of the Wright Brothers, Dayton, Ohio, to the current home of Sport Aviation, the EAA AirVenture in Oshkosh, Wisconsin.

The 2004 AirVenture Cup Race will attempt to replicate the excitement of the Bendix Trophy Races of the 1930s by providing a race open to EAA Members. Cross-country air racing is a fun and exciting sport for any pilot.

**Start:** The Race will stage at the Wright Brothers Airport (MGY) in Dayton, Ohio. The racers must arrive no later than 4:00PM(EST) on Sunday July, 25th for a pre-race briefing. The following day, after breakfast and pilot briefing, the racers will take off. Pilots will make an approach to the airport and fly over the pre-determined point. The pilots time will start when the aircraft passes over the pre-determined point, not on takeoff. The racers will then proceed directly to Rockford, IL (RFD) and then to their final destination, Oshkosh, WI (OSH).

**Pylon Turn:** After departing Wright Brothers Airport (MGY), racers will fly directly to Rockford, IL Airport (RFD) to make a pylon turn and then proceed directly to the finish line in Oshkosh, WI (OSH).

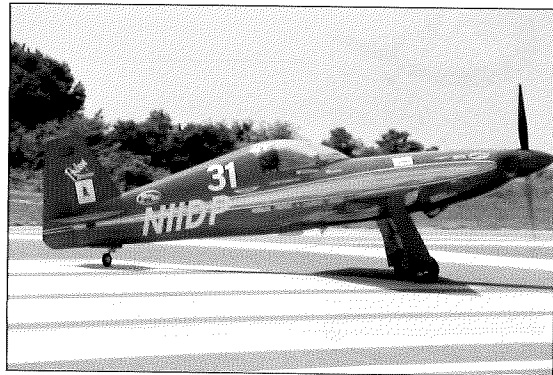


**En route:** During the race, all FAR's and race rules must be observed. All racers will file flight plans, VFR or IFR. Arrangements will be made with air traffic control (ATC) to allow racers to use their race number as their official ATC call sign for the duration of the race.

**Finish:** The finish line will be at a Private Airport in Lomira, WI. The airport is on the Chicago sectional, marked with a "U" The airport has one paved runway the approximate alignment is 16-34. After crossing the finish line the racers will recover at the Fond du Lac airport to stage for an optional mass arrival into Oshkosh.

**Timing:** The race will be timed by Official Race Judges. The race will be judged at the starting line, pylon turns at Sterling-Rockfalls and Rockford, and the finish line in Lomira. The judges will use the atomic clocks on the GPS satellites at all locations to ensure accuracy. The start, pit stop, and pylon times will be faxed/mailed to the finish line, and then confirmed by phone. By faxing these times, the race times and speeds can be computed as soon as the airplane crosses the finish line. The original hard copy of the times will be brought to the finish line by the race officials and will serve as verification.

**Race Scoring:** The race is a timed race, therefore the aircraft with the shortest time is the overall winner. Also, the aircraft with the shortest time in each category will be the winner of that category. Prizes will be awarded to the top three places in each category.



## 68 Sprint

Daniel Cox & Phil Wear

N66DC, this blue Vari-EZ, Race #68, has been flying for over 21 years. It has 1,100 hours of flight time and people are amazed that it still has the original paint! This plane was built by Jim Cox of Fort Smith, Arkansas and has its first flight in September 1983. It is powered by a Continental O-200 engine with a Great American propeller.

Daniel Cox is flying this Vari-EZ which was built by his father. Some of his earliest memories are of his father sanding and building the plane. At the age of 5, he was the first passenger! After many hours piloting from the rear, Daniel made his first touch-and-gos from the back seat. Later he transitioned to the front seat and made his first solo flight. He has logged many hours in high performance, complex aircraft since then, but nothing compares to the thrill of flying his Vari-EZ.

Flying as his co-pilot is Phil Wear. Phil served as a US Army helicopter pilot from 1965-1969 flying the UH-22, UH-1H and TH-55. Then



**Vari Ez**

from 1973-1999 he served as a US Air Force/Air National Guard pilot in the F-100, F-4C and F-16A. Currently Phil is a contract pilot and flight instructor; he has over 9,000 hours of flight time. This is the first AirVenture Cup for both men.

<b>Top Speed:</b> .....185 MPH	<b>Engine:</b> .....Continental O-200
<b>Range:</b> .....700 Miles	<b>Displacement:</b> .....200 Cu. Inches
<b>Fuel Capacity:</b> .....25 Gallons	<b>Horsepower:</b> .....100
	<b>Empty Weight:</b> .....670 Lbs.
	<b>Gross Weight:</b> .....1,250 Lbs.

## 70 Sprint

Leo Giles & Jerry Cobb

This red, black and white Skystar Vixen, Race # 70, first flew in 1993. Leo Giles and Jerry Cobb are flying Race #70 in their first AirVenture Cup. Leo was born in Oregon, raised in California, then relocated to Georgia for employment at a major airline. He started flying in 1966. He is currently employed as an instructor in a flight training department on the 737-300.

Jerry Cobb was born and raised in south Alabama and now lives in Georgia. He has over 22,000 hours of flight time in a combination of the airlines, military and civilian flights. Jerry flew F-4 fighters in the US Air Force and is now retired from a major airline. He has owned a Globe Swift for 35 years.



**Skystar Vixen**

<b>Top Speed:</b> .....100 MPH	<b>Engine:</b> .....Rotax 912
<b>Range:</b> .....640 Miles	
	<b>Empty Weight:</b> .....738 Lbs.
	<b>Gross Weight:</b> .....1,200 Lbs.

Race # 41 is a Rutan Long-EZ, owned, built and flown by Herb Rutter of Altoona, PA. The airplane is powered by a 115 hp Lycoming O-235 turning a Great American Fixed-Pitch Propeller. Construction of this airplane was completed by Herb Rutter over a 15-year period. During this period he made no modifications to Burt Rutan's plans. The airplane was first flown in October, 1995. It has made the trek from Altoona, PA and Oshkosh every year since it was built. The longest flight to date has been from its Pennsylvania base to Fort Collins, Colorado.

Flying race 41 is Herb Rutter of Altoona, PA. He started flying in 1946 and in that time has accumulated more than 3,500 hours. He retired as a maintenance superintendent in 1995. Besides building the Long-EZ, he has also restored a 1941 Piper J-3 Cub. He has one previous race in his log book. In the mid 1980s he raced in a Cessna 172 and lost to a Pitts Special. This will be Herb's 2nd AirVenture Cup.

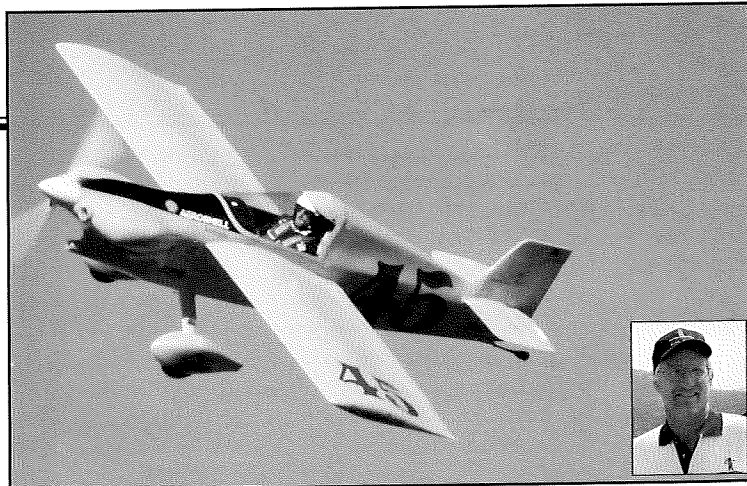


**Long Ez**

<b>Top Speed:</b> .....170 MPH	<b>Engine:</b> .....Lycoming O-235	<b>Total Time on Aircraft:</b> .....800 Hrs.
<b>Range:</b> .....1,400 Miles	<b>Displacement:</b> .....235 Cu. Inches	<b>Empty Weight:</b> .....910 Lbs.
<b>Fuel Capacity:</b> .....52 Gallons	<b>Horsepower:</b> .....115	<b>Gross Weight:</b> .....1,435 Lbs.

Race 45 is a Reno Race veteran Cassutt MIII. Designed for the Formula One Racing Rules. Built by Jay Jones, of Buena Vista, CO, this Cassutt is powered by a Continental O-200 turning a Catto Propeller. To decrease drag the Fuselage is covered with carbon fiber skin. The airplane was built over a 2 year period and was completed in 1997. It first raced at Reno in 1999 where it placed 4th in the Formula One Class. It has also raced in the 2000, 2002 and 2003 Reno Races. (The 2001 Races were canceled due to the 9/11 attacks)

Flying Race #45 is the owner/builder Jay Jones, of Buena Vista, CO. Jay is a Private Pilot with more than 500 hours of flying time. He is also a veteran of the Reno National Air Races, and a two time attendee of the Reno Pylon School. This is his first major cross country racing event and his first appearance in the AirVenture Cup.



**Cassut**

<b>Engine:</b> .....Continental O-200	<b>Total Time on Aircraft:</b> .....200 Hrs.
<b>Displacement:</b> .....200 Cu. Inches	<b>Empty Weight:</b> .....600 Lbs.
<b>Fuel Capacity:</b> .....18 Gallons	<b>Gross Weight:</b> .....850 Lbs.
<b>Horsepower:</b> .....100	

Briefing: The race pilots must attend two briefings before the race. The first briefing will be held on Sunday evening at 6:30 PM (EST) in a location TBD . At the first briefing, the race rules, starting procedures, pit stop, procedures for the pylon turn at Rockford, IL and the finish details will be discussed. A weather briefing will be provided from flight service. Details of the race will be found in the race packets picked up at pilot registration. Flight plan forms will be handed out.



The second briefing will be held on the morning of the race. This briefing will be an updated weather report, any last minute changes in procedures and answers to any questions. This second briefing will be held in conjunction with the race breakfast.

## Schedule

Sunday, July 25th, 2004

Pre-race participant activities in Dayton

12:00-6:30 p.m. (EST) Race crew check-in

6:30-8:30 p.m. (EST) Race Briefing

Shuttles to/from the hotel will be provided all day

6:30 p.m. (CST) Race banquet, open to friends and family of race participants

Awards Presentation - Wednesday, July 28th, 2004.

Presentation of awards at The Forum Plaza (time to be announced).

Monday, July 26th, 2004

7:30 a.m. (EST) Pilots Breakfast

8:00 a.m. (EST) Race Briefing

8:50 a.m. (EST) Engine Start

9:00 a.m. (EST) Race Begins

12:00 p.m. (EST) Starting line closes

5:00 p.m. (CST) Finish line closes

6:15 p.m. (CST) meet at race parking area for transportation to Banquet

# Hello Dayton, Good-Bye Kitty Hawk

By: Jack E. Watson, "Race 25"

Some people seem to think that the EAA AirVenture Cup Race started in 1998. In one respect, it did. By another measure of time, or shall we say according to historians, it started thousands of years ago...even before powered flight!

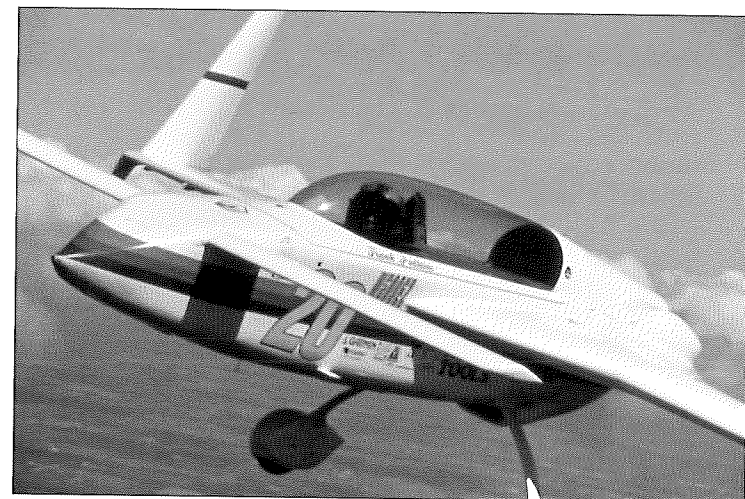
No one knows for sure when the first race of any sort actually took place. More than likely it had to do with food or showing-off for a member of the opposite sex. Man, by his very nature has always been a competitor. Competition is what inspires us. I'd venture a guess that the first race was a foot race by two men to retrieve a fresh kill. Before long, and after a full stomach, these same two men found that running in front of a crowd of women for their amusement and pleasure would garner them attention and adulation. To coin Bob Hoover's old saying during RENO AIR RACING starts, and to sum up the real beginning of racing I think history should simply state: In the beginning their was man, and his first thoughts after food and sex were "GENTLEMAN WE HAVE A RACE!"



Watching the thoroughbred and odds maker favorite "Smarty Jones" try and ultimately fail to capture horse racing's "Triple Crown" reminded that the outcome of any race is never a certainty. Since 1998 the Air Venture cup race has sort of been like the "Triple Crown." The running of this race "on time" has certainly never been a certainty. The first race was a non-stop 1000 miler. Several of the racers landed on fumes, one had a landing go badly at Kitty Hawk before the race started, but everyone had a blast. The race field (although small) included a "mixed bag" of aviators from a former astronaut to guys that built their airplane in a garage and held only a Private Pilot license with no Earth Orbits in their log books.

In 2000 the race had a last minute program change. Due to race course weather conditions the race committee did a miraculous job of rerouting the race with a stop at Dayton, Ohio to wait out the weather, and to move the racers in the general direction of Oshkosh. From 2001 to 2003 the stop at Dayton had become as much a part of the race

as its departure from Kitty Hawk. The first half of the race from Kitty Hawk to Dayton, Ohio was always the one that determined the outcome of the race. This was a long leg over mountains, and valleys that haven't changed much in the past 200 years. More than once I've looked down at the crest of a Blue Ridge Mountain as I'm passing 100 feet above it and hear a distinct ping-ing in my engine. (This is a strange phenomenon that also happens when I head out over water in a single engine plane.) Looking down at triple canopy trees for an hour can be a little unsettling, and severely limits your ability to find a suitable landing area should your engine (which incidentally is running wide open) decide to give up the ghost!



Anyone that thinks the AirVenture Cup race pales by comparison to other race events like RENO, NASCAR, INDY, etc. has never landed in a plowed field, lost part of your prop, cowling, spinner, or had a cylinder separate itself from the crank case. At the aforementioned races these or similar events often happen. The difference is help is only seconds away. NOT SO with the AirVenture Cup Racers. To put it mildly...you're pretty much on your own. If you were to crash, there would probably be no witnesses or first aid, and on much of the first leg we'd probably have a hard time finding you. In years past I've acted as a radio link for a number of the racers who have had real in flight emergencies. Once airborne all racers monitor a "RACE COMMON" frequency. Due to the small spacing between racers along the course air to air communication has been superb and provided a vital link and assist to those racers who have had problems in the past.

## 20 Sprint

Frank Pullano & Matt McCune

Race #20 is a Rutan Vari-EZ built by Victor Mondary of Brownsburg, IN and was completed in 1979. It features upgraded control rods, a Long-EZ pitch trim system, wing fences, vortex generators and vortilons on the main wing for improved control at slow speeds and an overblown canopy. Recently it went through Bob and Valerie Harris' "EZ Hanger" in Covington, TN. Race #20 is powered by a modified Continental C-90, converted to an O-200. N500EZ has accumulated more than 1,350 hours. Since its first flight the aircraft has received an electronics upgrade to include an EIS 4000 engine monitoring system, a GPS with moving map display, Dynon D-10 EFIS, and a Trio Digital EZ Autopilot.

Flying Race 20 is Frank Pullano Jr, of Mays Landing, New Jersey. Frank is a 16-year Senior Non-Commissioned Officer (NCO) in the New Jersey Air National Guard, currently called to active duty in support of various operations. He was trained as a crew chief on F-16s by Uncle Sam, and was bit by the aviation bug right away. His first light airplane flight was in a Stearman in the summer of 1991 and Frank obtained his Private Pilot Certificate a few months, and 80 hours, later. He has logged more than 600 hours of PIC time in several aircraft, besides his Vari-EZ, including, a Pitts S-2B, a WACO, a T-34 Mentor, and the F-16D Fighting Falcon. This is Frank's third appearance in the Airventure Cup, and he's back again for the love of the game. As he says, "I'm pretty much resigned to the fact that I'm not going to beat Sam Hoskins and Rob Martinson (unless they don't show up!) anytime soon, so I'll just take lots of pictures and shoot lots of film. We will be a camera platform primarily and a race plane as a secondary mission. We produced a pretty successful documentary on the 2003 race and we plan on making the sequel this year so if we haven't had a chance to interview you - COME FIND US so we can include your mug in the next film!"



Vari Ez

Flying with Frank this year is Matt McCune of Bucks County, PA. He is also a member of the New Jersey Air National Guard serving as a F-16 Crew Chief. At the time of this writing, Matt is deployed to a location in the Middle East in support of Operation Iraqi Freedom (Frank hopes he's back in time). Matt is also a senior in college and has aspirations of becoming an Air Force Pilot. He earned his private pilot license last summer and has been logging as many hours as possible both as PIC and in the back seat of the Vari-EZ with a video camera stuck to his face.

<b>Top Speed:</b> .....200 MPH	<b>Engine:</b> .....Continental O-200	<b>Total Time on Aircraft:</b> .....1,200 Hrs.
<b>Range:</b> .....900 Miles	<b>Displacement:</b> .....3200 Cu. Inches	<b>Empty Weight:</b> .....704 Lbs.
<b>Fuel Capacity:</b> .....25 Gallons	<b>Horsepower:</b> .....100	<b>Gross Weight:</b> .....1,150 Lbs.

## 22 Sprint

Sam Hoskins

Race #22 is a Q-200 built by Sam Hoskins of Murphysboro, IL over a five-year period. It has accumulated more than 1,350 hours of flight time since its first flight on June 9th, 1986. The Q-200 is powered by a modified Continental O-200A, turning a Catto composite propeller. The airplane is mostly built according to the plans, with the addition of differential brakes and several engine mods which put out an estimated 135HP. The Q-200 has a 750-mile range on 30 gallons of fuel. In Sam's first go at the AirVenture Cup, he placed third out of four in the Sprint class. Last year, Sam dropped a spot and placed 4th out of 12, even though he was 10 miles an hour faster. Wanting to get even, rather than getting mad, he has installed a new prop and electric ignition for this year's race.

Inspired by his father, who served in WWII as a Navigator on B-24s and PBYS in the US Navy, Sam joined the Civil Air Patrol during the 1960s as a teenager. Sam started skydiving at age 21 and soon was performing at airshows, including the USA Bicentennial EAA Oshkosh 1976. As a skydiver, Sam participated in national championship skydiving competitions and was a participant in two World Record Freefall formations. He now has over 2,000 jumps.

In 1979, Sam learned to fly and bought a Cessna 172. In 1981, he sold the Cessna and bought a kit for the Q-200 that would become N202SH. On June 22, 1999, Sam and his Q-200 made a coast-to-coast flight from French Valley Airport in Murrita, CA to the Dare County Airport in Manteo, NC establishing a coast-to-coast speed record for the Q-200 type. Sam completed the flight in 17 hours and 55 minutes becoming the first Q-200 to cross North America in a single day. This adventure was



Q-200

featured in the June 2000 issue of Kitplanes Magazine.

Since the first flight of the Q-200 on June 9th, 1986, Sam has logged more than 1,350 hours flying the Q-200 making him one of the highest time Quickie pilots in the world, and N202SH one of the highest time Quickies in the world. When he is not flying, Sam is making commercial explosives, as a manufacturing engineer for the Dyno Nobel Company. Sam is also a 23 year veteran of "Rich's Incredible Pyro" setting up airshow pyrotechnics at airshows across the country including at EAA - Oshkosh. Sam would like to thank his bride, Sandy Smith, for putting up with him during the relentless race preparations.

<b>Top Speed:</b> .....190 MPH	<b>Engine:</b> .....Continental O-200	<b>Total Time on Aircraft:</b> .....1,350 Hrs.
	<b>Displacement:</b> .....200 Cu. Inches	<b>Empty Weight:</b> .....640 Lbs.
	<b>Horsepower:</b> .....100	<b>Gross Weight:</b> .....1,200 Lbs.



RV-4

Race #74 is a Van's Aircraft RV-4 being flown by owner/builder Scott Spencer of Indianapolis, IN. This RV-4 was originally built by Herschel Wilson of Tomball, TX but was damaged early in its life. It was salvaged by Scott Spencer, when he purchased the airplane from the insurance company and extensively rebuilt the airplane. This RV-4 is powered by a Lycoming O-320 turning a Global fixed-pitched ground-adjustable carbon fiber propeller. When Scott rebuilt the plane, he added several customized changes to the cockpit of the RV-4 allowing him to have more instrument panel space and additional storage space in the cockpit.

Flying Race 74 is Scott Spencer of Indianapolis, IN. Scott is a charter pilot by profession and flies a mix of business turboprops and small jets. He holds an ATP certificate and has accumulated 4500 hours of flight time. During his career, Scott has also worked as an engineer in the defense aerospace industry on a fighter plane program and spent several

years working as an A&P mechanic, working mainly on light helicopters. It was during this time, that he was working as a mechanic that he rebuilt the RV-4. He has also worked as a flight instructor in fixed wing aircraft and gliders as well as working as a glider tow pilot. Scott has previously flown in the 2003 AirVenture Cup where he placed first in the Formula RV-Red class.

<b>Top Speed:</b> .....200+ MPH	<b>Engine:</b> .....Lycoming O-320	<b>Empty Weight:</b> .....937 Lbs.
<b>Range:</b> .....860 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Gross Weight:</b> .....1,00 Lbs.
<b>Fuel Capacity:</b> .....32 Gallons	<b>Horsepower:</b> .....150	

## Sprint

The Sprint class includes any experimental category aircraft with an engine displacement of 240 cubic inches or less.

- |    |                             |               |
|----|-----------------------------|---------------|
| 20 | Frank Pullano & Matt McCune | Vari Ez       |
| 22 | Sam Hoskins                 | Q-200         |
| 41 | Herbert Rutter              | Long Ez       |
| 45 | Jay Jones                   | Cassut        |
| 68 | Daniel Cox & Phil Wear      | Vari Ez       |
| 70 | Leo Giles & Jerry Cobb      | Skystar Vixen |
| 88 | Britton Shaw                | Vari Ez       |



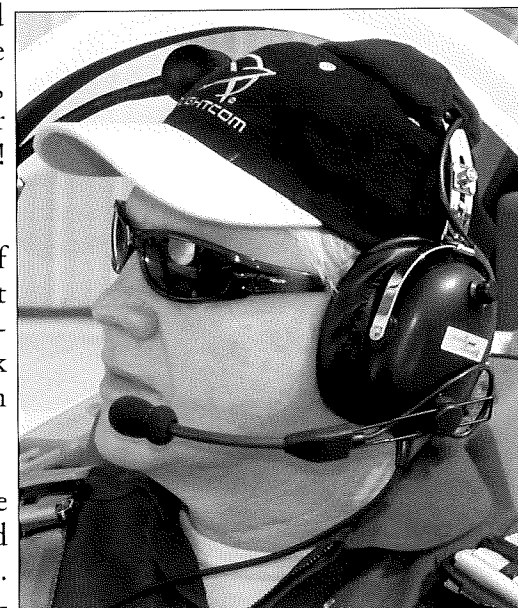
In 1999 I flew by the Wright Brothers Memorial for the first time and heard the "RACE 25 MARK" call as I flashed by the monument and turned on course for the race. It was a magical moment. I still get a lump in my throat thinking about it. For me it was a way of saying thank you to the two brothers who had by their imagination and genius molded my entire life. I had spent over 30,000 hours in the air by 1999 flying hundreds of different types of aircraft and millions of passengers in the process. I thought that being an Airline Captain defined who I was...I WAS WRONG! Since that first race I new that win, lose or draw I'd always be a race pilot even when age 60 takes me out of the airline cockpit.

I really enjoyed the race departing Dare County Airport and flying across the Albemarle Sound to the Wright Memorial for the start line. But, in all honesty the Outer Banks weather during the summer is very unpredictable. (Except you can always count on it being HOT...HOT...HOT!) Will I miss flying over uninhabited parts of the countryside with no place to land? YES and NO! Having flown the race 5 times, I've found that finishing it, without breaking anything is for me almost an impossibility. Even after all these years of flying my best flying stories will always be of the Air Venture Cup race. Kitty Hawk added a mystique to the race, for sure, but it was also as unpredictable a place to fly from as the Wright Brothers found it to be in 1903. Because of the Kitty Hawk start I've become a much better pilot and feel a closer kindred ship to the Wright brothers. The planes I've raced (a Long EZ, a Yak 55M a Speed Canard and this year a Glasair SIIRG) could be a test bed for destructive testing of aviation components. I really do over maintain my airplanes, but racing at full throttle for 1000 miles has taught me a lot about flying and parts reliability. If you race long enough you will eventually break something. That's part of racing. The knowledge gained from these experiences (and failures) from Kitty Hawk has been priceless. Thank you Wilbur and Orville for allowing me to learn more about my craft!

Scratching Kitty Hawk as a start point for this year's 7th running of the AirVenture Cup Race certainly changes the race. The last race from Kitty Hawk was the year of the 100 year celebration of powered flight. I stood along side fellow racer Keith Phillips (RACE 10) at the foot of Kill Devil Hill and watched them try and re-create history. The Wright flyer failed to fly...I guess some things are not meant to be duplicated. It's only fitting that we say goodbye to Kitty Hawk this year and hello to Dayton. Maybe we'll fly from Kitty Hawk again...I hope so, but the growth of the Race has for now, outgrown Kitty Hawk. Dayton promises to be a willing host and has ample resources to support the growth of the Race. Plans for the present and future are to have an "X-Plane Shoot Out" at Dayton to replace the time trials of previous years. This puts 4 planes on the runway at a time and launches them at intervals for a tail chase and radar gun timed race around the airport. The speeds recorded will help determine starting order. This is an event that will bring out the Dayton public for a chance to see low fast flying "X-Planes" orbit the field, not just leave it for the beginning of the AirVenture Cup Race Race. For the race to continue to grow public support is a necessity. Think about it! Without fans where would NASCAR be...

For all the new and old racers, whether you like it or not you are part of aviation history. Record keeping and copies of all the printed words about the race have been saved. Racer Frank Pullano Jr (RACE 20) even produced a movie about the race. I never imagined I'd be in a history book about airplane racing. I guess it's only a matter of time. For now all I can say is "HELLO DAYTON GOODBYE KITTY HAWK!"

Jack E. Watson (RACE 25) is a 5 time veteran of the AirVenture Cup Race with over 35,000 hours flying time. When he's not racing you'll find Captain Watson in the cockpit flying for one of our nation's largest airlines. Visit Jack's website at <http://www.hawkairracing.com> for more information about air racing and Jack's race airplanes.



Author: Jack E. Watson

# Race Rules

- 1) All FARs will be followed.
  - 2) No temporary fuel tanks in passenger compartment will be allowed. Fuel requirements will be VFR or IFR minimums.
  - 3) All racers will over fly two turn Pylons along the race course. The first will be at the Whiteside County Airport in Sterling-Rockfalls, IL (SQI). The Second Pylon will be at the Rockford Airport, Rockford IL, (RFD). Failure to do so will result in disqualification. Both of the Pylons will be marked at a pre-designated point on the airport. The aircraft must pass over the designated point at an altitude less than 800' AGL. Aircraft are required to establish communication with Rockford Approach no less than 20 miles from the airport.
  - 4) Cutting a Pylon at either the start or finish will result in a 45-minute time penalty.
  - 5) Failure to fly over either the Sterling-Rockfalls or Rockford airport will result in disqualification.
  - 6) All pilots must show credentials upon check-in at Dayton Wright Brothers Airport prior to being allowed to fly. Those credentials required of all pilots are:
    - 1) Pilot Certificate (Private or higher) with appropriate ratings and endorsements for the aircraft flown.
    - 2) Current Medical Certificate
    - 3) Current flight review
  - 7) In addition to pilot credentials, participants will be required to show the following documents for their aircraft. The documents required are:
    - 1) Airworthiness Certificate
    - 2) Registration if not flown by the owner, written permission from the owner is also required.
    - 3) Current annual inspection sign-off (photocopy is ok)
    - 4) Other inspections required by FARs must be complied with.
 Race officials at the check-in will verify these documents the day before the race.
  - 8) The pilot must be a current EAA Member. Proof of current membership will be verified.
  - 9) Insurance Requirements: All participants must provide EAA with an insurance company issued Certificate of Insurance evidencing aircraft liability insurance, in the amount of no less than \$1,000,000. This coverage must include air racing, waiver of subrogation, 30-day notice of cancellation, and additional insured status as follows:
 

EAA, 2004 EAA AirVenture Cup Race, their Directors, Officers, Members and Volunteers.  
 P.O. Box 3086  
 Oshkosh, WI 54903-3086
- The certificate of insurance must be submitted with application. EAA reserves the right to decline any Certificate deemed unacceptable. NOTE: EAA Risk Management is available to assist any EAA member regarding insurance requirements and availability. If you require such assistance, please contact the EAA Insurance Office @ (920) 426-4822.
- 10) All race crews must attend both pre-race briefings. The Main Pre-Race Briefing will be held on Sunday Evening in Dayton. An updated weather briefing will be held prior to departure on Monday Morning.
  - 11) The AirVenture Cup will be limited to a crew of two, a pilot and co-pilot. Pilots do have the option of flying solo at their discretion.
  - 12) All racers will be required to file a flight plan, VFR or IFR, for the race. If a racer drops out of the race for any reason, in addition to closing their flight plan, they will need to contact the finish line and inform them that they are dropping out of the race. Phone numbers will be available at the briefing.
  - 13) All aircraft participating in the AirVenture Cup Race will be required to display race numbers in a color that contrasts the aircraft's paint. Race numbers will be displayed on both sides of the fuselage and under the left wing. Race numbers will be no smaller than 18 inches and must be visible to the race officials on the ground. Race numbers must be applied to the aircraft no later than 7:30 a.m. (EST), the day of the race. Aircraft that are too small to display 18 inch numbers on the fuselage need to contact the contest chairman at least two weeks prior to the race to make other arrangements.
  - 14) Weather at the starting line must meet at least VFR minimums. Weather related decisions in regards to the start of the race will be at the discretion of the contest committee. In the event of poor weather the race will be delayed.
  - 15) The weather must meet VFR minimums between Dayton(MGY), Rockford (RFD) and Oshkosh (OSH). If conditions become IFR after leaving Dayton, the race will hold at Rockford until conditions improve. If racers are unable to make Rockford, they should land as soon as practical, at the nearest safe airport.
  - 16) In the event of a racer returning to Dayton after the start of the Race, the racer will have until 12:00 p.m. (EST) to restart the race. The starting line will be closed at 12:00 p.m. (EST).
  - 17) The finish line is located at a private airport in Lomira, WI. Racers will overfly the runway from Southeast to Northwest. There is a large factory located just Northeast of the airport. The factory is a no-fly zone, any racers over flying the factory will be disqualified.
  - 18) The contest committee reserves the right to change the race course as needed in the name of safety. In the event of a change in the event, all participants will be briefed accordingly.

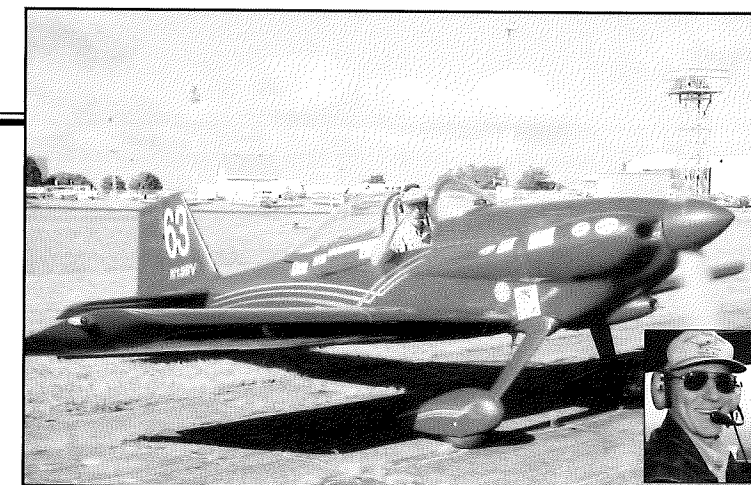
## 63 Formula RV

Bob Vasey

N13BV, Race # 63 is a red RV-3 with yellow and white striping. The plans for this plane were originally purchased in 1973, the 13th set sold by Van's Aircraft. Bob purchased the project in 1994 after it had been started and then sat for 15 years; Bob finished it in 9 years and 3000 hours. The first flight for N13BV was on April 29, 2003. When building his RV-3, Bob included electric flaps. The original RV-3 had only a 24 gallon tank between the panel and the fire wall. Wing tanks then became an optimum with 12 gallons on each side, then Vans increased the volume to 15 gallons on each side. Bob figures he has 14.8 gallons usable in each wing now.

The RV-3 was the first airplane to be completely designed by Dick VanGrunsven. The RV-1 was a highly modified Stits Playboy; the RV-2 has yet to be finished. The RV-1 had a steel tube fuselage and metal wings, much like the wing used on the RV-3. Inspired by the tremendous gain in performance over the original Playboy, Van decided to build an all-new airplane, making more improvements to the design. The result of this work is the RV-3. All of the other RV airplanes can trace their heritage back to this little sport plane. This is the first RV-3 to participate in the AirVenture Cup, having also participated in last year's race.

Flying Race #63 is Bob Vasey. Bob is a practicing large and small ani-



RV-3

mal veterinarian. Bob started out by soloing a J3 Cub in 1962 on his 8th wedding anniversary. He has accumulated over 9000 hours, including 3000 as an Alaskan bush pilot, 2500 on the pipeline patrol, and a few hundred as an agricultural spray pilot. Bob built a 78% scale P51D powered with a 400CID Ford V8 engine. He has also made his own 4 blade ground adjustable propeller. Bob and his wife, Skip, have flown together on 15 trips to Alaska from Kansas. Bob is an AirVenture Cup Veteran, having flown in 2002, with his son Keith, and in 2003 with his wife, Skip.

<b>Top Speed:</b> .....210 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Total Time on Aircraft:</b> .....130 Hrs.
<b>Range:</b> .....750 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....817 Lbs.
<b>Fuel Capacity:</b> .....38 Gallons	<b>Horsepower:</b> .....150	<b>Gross Weight:</b> .....1,300 Lbs.

## 72 Formula RV

Bobbi Boucher

This white, pink and gold RV-4, Race # 72, was built by Bobbi Boucher over 6 years. This plane first flew in January 1998 and has accumulated 360 hours since that time. N2QT is powered by a 160 horsepower Lycoming O-320 turning a fixed pitch wooden three-blade propeller.

Flying Race #72 is Bobbi Boucher. Bobbi holds a commercial license along with a flight instructor license for single and multi engine. She started flying sailplanes and first soloed in 1993. She spent six years in the Navy and currently makes her living as an Airframe and Powerplant Mechanic as the owner of the Plane Doctor, an aircraft repair shop. This will be Bobbi's third AirVenture Cup.



RV-4

<b>Top Speed:</b> .....174 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Total Time on Aircraft:</b> .....360 Hrs.
<b>Range:</b> .....550 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....944 Lbs.
<b>Fuel Capacity:</b> .....38 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,500 Lbs.

Race #55, Razzmatazz, is a colorful blue-on-white RV-6A which was built by James Norman from a slow-build, non-prepunched kit over 7 and ½ years and flew its first flight on December 28, 2002. Razzmatazz has over 100 modifications, including custom-built fiberglass fairings and cowl. Cooling is via a custom carbon fiber plenum. The instrument panel is also a customized fiberglass piece that houses a complete IFR panel, including a full UPSAT stack, coupled autopilot, AOA, stereo and more. A two-tone leather interior and plush carpet finish the interior.

Razzmatazz is a multiple award winner having won the Tony Bingelis Memorial Award for Custom Builts in 2003, the EAA Centennial Homebuilt of the Week in June 2003, Champion at AirVenture 2003, Best Airplane and Best Metal Airplane at the 2003 Sun-n-Fun fly-in, and Grand Champion at the SWRFI in 2003.

Flying Race # 55 this year are Jim and Josh Norman. Jim is a surgeon who builds and flies for fun. He has been flying for 10 years and has



**RV-6A**

about 900 hours, most of it in his Piper Archer. Josh is Jim's son; he's going into the 5th grade this year. He enjoys baseball, soccer and any electronic game. This is Jim's second race and Josh's first. Josh will be a big help with navigation for this race (when it doesn't interfere with his GameBoy!). Jim started working on Razzmatazz when Josh was only 2 ½ months old, so he thinks everyone has an airplane in their garage!

<b>Top Speed:</b> .....219 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Total Time on Aircraft:</b> .....130 Hrs.
<b>Range:</b> .....900 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Empty Weight:</b> .....1,150 Lbs.
<b>Fuel Capacity:</b> .....38 Gallons	<b>Horsepower:</b> .....180	<b>Gross Weight:</b> .....1,800 Lbs.

Race #56, this Van's RV-8 was built by Scott Jordan in a 16'x 20" unheated/uninsulated tool shed over a four and a half year period, flying for the first time in October 2001. Powered by a 180hp Lycoming O-360-A1F6D turning a Hartzell aerobatic constant speed propeller, N733JJ is capable of 230mph. The engine is equipped with an Airflow Performance fuel injection system and the right magneto was replaced with an Electro Air ignition system. N733JJ was built stock according to Van's Aircraft's plans and is equipped with an IFR instrument panel complete with a Garmin GNL 300XL IFR approach approved GPS. The airplane is equipped with an inverted fuel and oil system to allow for aerobatics. This is the 3rd AirVenture Cup for this plane and pilot.

Flying Race # 56 is Scott Jordan, of Wappingers Falls, New York. Scott is an Airline Transport Rated pilot with more than 10,000 hours of flight experience in more than 50 different types of aircraft ranging from the J-3 Cub to the B-1B Bomber. Scott earned his Private Pilot Certificate two days before graduating from high school in 1974. After graduation, Scott attended the University of Southern Maine in Portland where he earned a Bachelor's degree in Business Administration. Scott paid for college working at the airport in Line Service, as a Flight Instructor and later and a charter pilot. After college Scott joined the United States Air Force and went on to become a B-52 pilot. He later advanced to the level of emergency procedures evaluator in the simulator. Scott was selected as part of the initial cadre to fly the B-1B at Ellsworth AFB, in Rapid City,



**RV-8**

South Dakota, where he was twice named to the prestigious Bomb Competition Team. During this time, Scott also earned a masters degree in Aviation Management from Embry-Riddle Aeronautical University.

After leaving the military in 1990, Scott was hired by PepsiCo as a corporate pilot, and has since served as a Captain on world-wide flights since 1994. During his Air Force and PepsiCo Careers, Scott has remained active in private flying and has continued to instruct as well as attend and present safety talks at industry, Air Force and FAA sponsored safety Seminars. In addition Scott is an EAA Flight Advisor, and has served as safety officer for PepsiCo for three years.

<b>Top Speed:</b> .....230 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Total Time on Aircraft:</b> .....265 Hrs.
<b>Range:</b> .....800 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Empty Weight:</b> .....1,140 Lbs.
<b>Fuel Capacity:</b> .....42 Gallons	<b>Horsepower:</b> .....180	<b>Gross Weight:</b> .....1,825 Lbs.

# Unlimited

The Unlimited Class includes any experimental category aircraft with a turbocharged engine with a displacement of 1400 cubic inches or less. There will be class winners in both fixed and retractable gear.

- |    |               |          |
|----|---------------|----------|
| 11 | Jim Rahm      | Bear 360 |
| 29 | John Morrison | E Racer  |



Bob Wolstenholme was the winner of the 2003 AirVenture Cup in his Lancair IV-P with an impressive speed of 253.91 mph including some inflight maintenance.

Race 11, flown by Jim Rahm of New Smyrna Beach, FL, is a silver, all-metal, high-performance, M-14P powered tandem Bear 360. This is a one-of-a-kind mini fighter airplane which was designed by Sergei Yakovlev, of the Yakovlev Design Bureau, in Orenburg, Russia. This plane was a joint venture between Yakovlev Aircraft Company and Bear Aerospace; all flight tests were conducted by Skip Holm. The Bear 360 is a two seat, low wing monoplane, reminiscent of classic World War II aircraft.

The pilot of Race 11, is Jim Rahm of Daytona Beach, FL. He is co-owner of Eletonic Technologies, Inc., an aircraft avionics company. Jim is a Private Pilot with single and multi-engine ratings. He also holds an



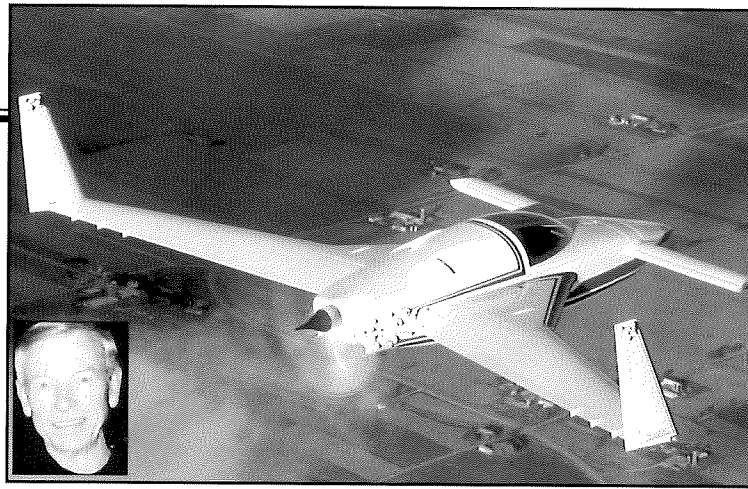
**Bear 360**

instrument and seaplane rating. He has more than 14,000 hours of flight experience including aerobatics and taildraggers. Jim has built 3 homebuilts, including his Lancair IVP with a liquid cooled V8 engine, with which he holds a world speed record for the fastest V8 engine, at 385 MPH. This will be Jim's 6th AirVenture Cup.

<b>Top Speed:</b> .....250 MPH	<b>Engine:</b> .....Vandev M-14P	<b>Total Time on Aircraft:</b> .....75 Hrs.
<b>Range:</b> .....1,100 Miles	<b>Displacement:</b> .....620 Cu. Inches	<b>Empty Weight:</b> .....1,900 Lbs.
	<b>Horsepower:</b> .....400	<b>Gross Weight:</b> .....2,700 Lbs.

N345JM is an E Racer Mark II. John Morrison is the builder of this E Racer. He picked it because of its looks, the use of an automotive engine, the speed and the retractable gear. This plane was first flown in 1996 by the designer, Shirl Dickey, powered with a 300 hp supercharged Chevy V6. John tried for two years to control the radiant heat caused by the exhaust manifolds but was unable to accomplish this; so in 1998, decided to change to an aircraft engine, the Lycoming O-540, which powers the aircraft today. It is one of only a few E Racers flying today and was the first to use a supercharger on a IO-540 in 1998.

Flying Race #29 is John (Jack) Morrison of Aurora, IL. Jack was fascinated with airplanes from a young age. At 10 he bought a set of plans for the Waco through the Popular Mechanics magazine for 50 cents. It took a long time to build and he was afraid to fly it once it was finished to it hung in the local hobby shop for about 7 years until the store closed and



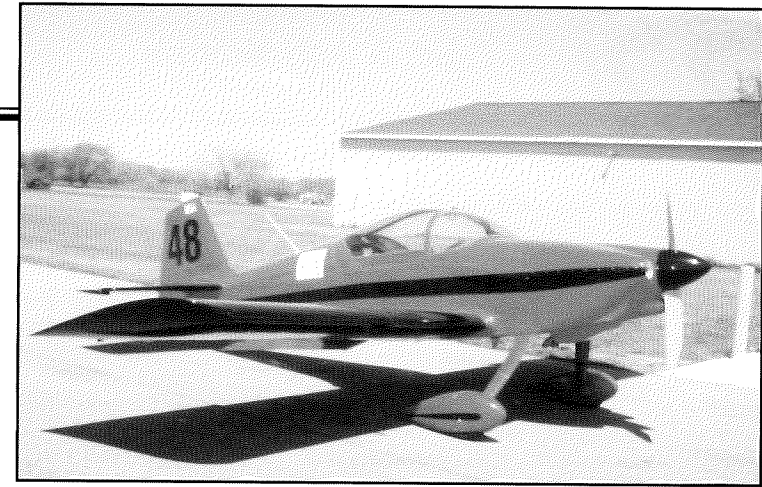
**E-Racer**

Jack hasn't seen it since. Jack was into boating for a number of year, then when his children grew up and moved away, his interest in boating diminished and he decided to build an airplane. Jack acquired his pilot's license in February 1999. He owned Morrison Body and Paint Shop from 1961-2001 and since then has worked for the City of Aurora-Risk Management.

<b>Top Speed:</b> .....300 MPH	<b>Engine:</b> .....Lycoming IO-540
<b>Range:</b> .....600 Miles	<b>Displacement:</b> .....540 Cu. Inches
	<b>Horsepower:</b> .....300
	<b>Empty Weight:</b> .....1,430 Lbs.
	<b>Gross Weight:</b> .....2,250 Lbs.

Race #48 was built by Dave Weisgerber in 1,500 hours. This black and red RV-6 can carry two people 700 miles non-stop with a top speed of 195 miles per hour. The aircraft had its first flight in May of 1997. The RV-6 is made out of aircraft aluminum. Designed to cruise fast, land slow and be able to operate from short, grass runways, the RV series of aircraft are known for fulfilling their slogan of "Total Performance." This plane has been raced by Dave in the AirVenture Cup each year since 2000.

Flying race number 48 is Dave Weisgerber, who is a private pilot single engine land. He has been a licensed pilot since 1991 and has more than 500 hours of flight time in experimental aircraft. Dave got interested through his dad, and started flying with him when he was just 10 years old. Dave eventually got his private pilots license when he was 25. Since



**RV-6**

then he has built many airplanes including a Sonari II, Kitfox, and a Hatz Biplane. He has also restored a 1946 Aeronca Champ. This will be Dave's 5th AirVenture Cup.

<b>Top Speed:</b> .....195 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Total Time on Aircraft:</b> .....300 Hrs.
<b>Range:</b> .....700 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....960 Lbs.
<b>Fuel Capacity:</b> .....39 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,600 Lbs.

Race # 53 is a blue and white RV-6A being flown by the husband-and-wife team of Scott and Wendy Gesele. This aircraft was built by Scott in his garage over a period of 4 ½ years. N506RV was completed in late 1997 and has been flown all over the US from their home in New York, including trips to Key West, Montana, Wyoming and Oshkosh.

Flying Race # 53 are Scott and Wendy Gesele who also flew in the 2003 AirVenture Cup together. Scott flies for a regional airline in Dulles, VA; he has almost 4000 hours including over 600 hours in his RV6A. Wendy is a high school biology teacher and has about 400 hours as a co-pilot with Scott.



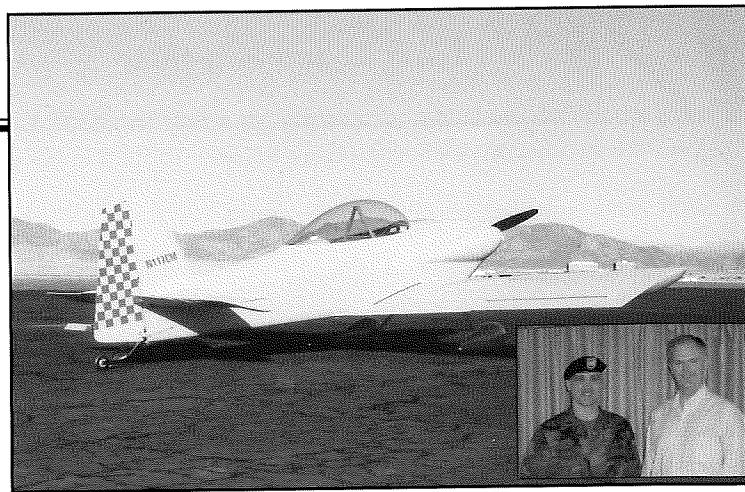
**RV-6A**

<b>Top Speed:</b> .....200 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Total Time on Aircraft:</b> .....720 Hrs.
<b>Range:</b> .....600 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....1,100 Lbs.
<b>Fuel Capacity:</b> .....38 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,650 Lbs.

# 34 Formula RV Chris Murphy & James Achord

Race 34 is a Van's Aircraft RV-4. This yellow and red with checkers on its tail RV-4 was designed by Dick VanGrunsven, of North Plains, Oregon in 1979 as a follow-on to his very successful RV-3 single seat sport plane. It carries two people in tandem at speeds of 200 mph. It was built by Chris Murphy with the help of friends in his garage, hanger and shop over a 10 year period. It first flew in October of 2001. It is powered by a 160 horsepower Lycoming O-320 turning a fixed pitch metal propeller. It is currently based in Fort Collins, CO

Flying Race 34 is Chris Murphy of Fort Collins, CO. Chris is a 737 Captain for a major airline and has more than 12,000 hours of flight time. While in high school he worked at the airport in his hometown washing airplanes and as a lineboy to pay for flying lessons. He soloed for the first time on his 16th birthday and passed his checkride for his Private Pilot Certificate on his 17th Birthday. After high school Chris enlisted in the United States Air Force where he served as a crew chief on the McDonnell Douglas F-4 Phantom II. After his service in the Air Force, Chris went to work for an airline as a mechanic and continued to fly outside of work as a flight instructor to build experience. Later he served as a Flight Engineer and later flew as First Officer before becoming a



**RV-4**

Captain on the 737. Chris has owned a variety of airplanes, but his favorites have been his RV-4, a Globe Swift, Aeronca Chief, and an Aeronca Champ. This is Chris' second AirVenture Cup.

Chris had planned to have a co-pilot again this year, his cousin James Achord who raced with him last year. However James has been called up to active duty as a member of the 131st Aviation Regiment of the US Army and is serving in Afghanistan. Since he is serving his country Chris asked to include him as an honorary crewmember.

<b>Top Speed:</b> .....185 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Total Time on Aircraft:</b> .....200 Hrs.
<b>Range:</b> .....500 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....950 Lbs.
<b>Fuel Capacity:</b> .....32 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,500 Lbs.

# 44 Formula RV Brent Anderson

This yellow, blue and white RV-4 was built by Brent Anderson over 11 years in his garage and hangar. Race # 44 was built from a standard Vans RV-4 kit but has had several modifications from the original plans. Brent has designed his own engine and oil cooling scheme which is devised for cooling drag reduction as well as cooling efficiency, and consists of a plenum enclosure over each bank of cylinders. N244BA also has a custom throttle quadrant, flush retracting tiedown rings, and custom tail-wheel steering links.

Brent Anderson is flying this aircraft in his first AirVenture Cup and his first race experience overall. He first flew this aircraft in September 2000 and uses it for pleasure, which includes sport flying, aerobatics and cross-country travel. Brent is an engineer and has over 2,000 hours of



**RV-4**

flight time including time in Cessna 150, 152, 172, and 182s; Beech C-33, Citabria 7ECA, and the RV-4, RV-6, and RV-6A.

<b>Top Speed:</b> .....211 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Empty Weight:</b> .....1,033 Lbs.
<b>Range:</b> .....900 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Gross Weight:</b> .....1,670 Lbs.
<b>Fuel Capacity:</b> .....32 Gallons	<b>Horsepower:</b> .....160	

# Sport

The Sport Class includes any experimental category aircraft with a normally aspirated engine and a displacement of 1000 cubic inches or less. The Sea Sport Class includes any experimental category seaplane with a normally aspirated engine and a displacement of 1000 cubic inches or less.

- |    |                            |                |
|----|----------------------------|----------------|
| 5  | Lee & Jay Behel            | Lancair Legacy |
| 10 | Keith Phillips             | SX-300         |
| 18 | Rob Logan & Mike Mahar     | Lancair Legacy |
| 24 | Rich & Rick Guerra         | Velocity XLRG  |
| 50 | George & Joan Osborne      | Seawind 3000   |
| 60 | Art Culver & Tiger Maguire | Seawind 3000   |
| 80 | Keith Walljasper           | Seawind 3000   |

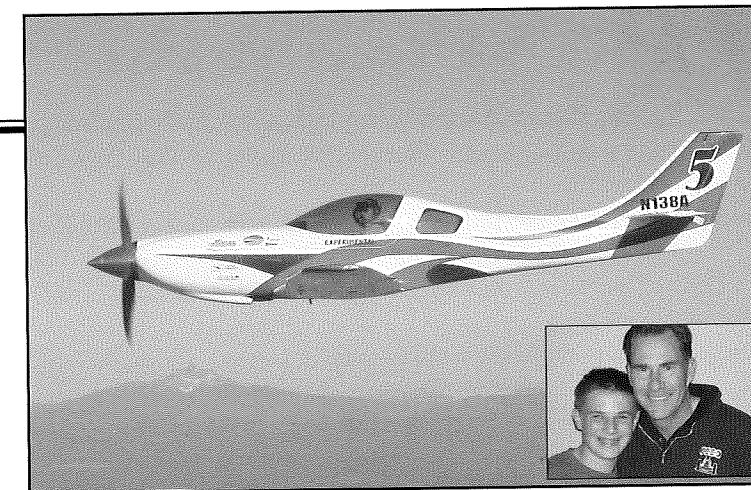


Race 60, Art Culver was the first seaplane to participate in the AirVenture Cup, and was instrumental in establishing the Sea Sport class.

# 5 Sport Lee & Jay Behel

This 2002 Lancair Legacy was built to race. It made its racing debut at the 2002 Reno Air Races, before it was given it's red, white and blue paint! At Reno it was the fastest normally aspirated sport class airplane. The 2004 AirVenture Cup will be the second Cross Country Race for this Legacy, having also raced in last year's AirVenture Cup. The big Continental turns a Hartzell Constant Speed propeller to give the airplane its race performance. Construction of this airplane was accomplished from a kit from Lancair, by Andy Chiavetta, of Laguna Beach, CA over a period of two years. During this process he modified the cowling and the flaps to enhance the performance of the airplane.

Flying the #5 Legacy is the father and son team of Lee and Jay Behel, who are making their 5th appearance in the AirVenture Cup together. In 2000 and 2001 they placed first in the Sport Class flying a Questair Venture. In 2002, they won the first running of the Turbine Class flying a Lancair IV-PT. And in 2003, they won the Sport Class in this Lancair Legacy. Lee is a former F-4 pilot, now he owns a Porsche and Audi Dealership in San Jose, CA. Lee is very active in Air Racing, serving as one of the founding members of the Sport Class Racing Association, an organization formed to open the National Championship Air Races in



**Lancair Legacy**

Reno up to Experimental/Kit aircraft. He is also a past President of the organization, and continues to serve on the board of directors. In addition to his service on the organizational level, Lee has also been an active racer, having raced in the Reno Races and the AirVenture Cup multiple times.

Flying with Lee, is his son, Jay who has finished his freshman year at Pinewood High School in Los Altos. Jay has been flying with his dad for several years, including multiple AirVenture Cup Races together.

<b>Top Speed:</b> .....300+ MPH	<b>Engine:</b> .....Lycoming IO-550	<b>Total Time on Aircraft:</b> .....200 Hrs.
<b>Range:</b> .....1,000 Miles	<b>Displacement:</b> .....550 Cu. Inches	<b>Empty Weight:</b> .....1,700 Lbs.
<b>Fuel Capacity:</b> .....70 Gallons	<b>Horsepower:</b> .....310	<b>Gross Weight:</b> .....1,250 Lbs.

# 10<sub>Sport</sub>

## Keith Phillips

Race #10 is a Swearingen SX-300, designed in the early 1980s by Ed Swearingen, this is one of the first "super kit planes." Designed for high speed cross country flying, the SX-300 was developed as a military trainer. Keith Phillips purchased the kit that would become Race 10 in 1985. While it was a difficult airplane to build, taking nearly 8,000 man-hours to complete, Keith says it is a well-designed airplane. During the building process, Keith modified the rudder pedals and seat position to provide him with more legroom. He added a bubble canopy in place of the original design. He also added an emergency blow down gear system to assist in lowering the landing gear if the primary system fails. In addition, a throttle was added on the left side of the cockpit to allow the pilot to fly with either hand. The SX-300 is very fast and Keith reports that it feels like a small fighter.

Keith Phillips has been flying for over 50 years. He first started getting interested in flying in the early 1950s when he had a paper route that



### SX-300

included the Maule Airport in Napoleon, Michigan. He eventually got hired at the airport and began to fly in a J-4 Cub coupe. Keith is a former USAF fighter pilot and has worked as an Aerospace Consultant. He has flown a wide range of aircraft over his career, including jet fighters, aerobatic biplanes, and motorgliders. Besides the SX-300, Keith has also built a Pitts Model 12 and a Tailwind. Keith has raced in several previous AirVenture Cups as well as several Sun 100 races.

<b>Top Speed:</b> .....300 MPH	<b>Engine:</b> .....Lycoming IO-540	<b>Total Time on Aircraft:</b> .....500 Hrs.
<b>Range:</b> .....1,000 Miles	<b>Displacement:</b> .....540 Cu. Inches	<b>Empty Weight:</b> .....1,750 Lbs.
<b>Fuel Capacity:</b> .....64 Gallons	<b>Horsepower:</b> .....300	<b>Gross Weight:</b> .....2,400 Lbs.

# 18<sub>Sport</sub>

## Rob Logan & Mike Mahar

Race #18 is a yellow Lancair Legacy 2000 flown by Rob Logan of Cleveland, OH. This aircraft made its first flight in December 2002 after 18 months of build time. Rob Logan was the builder and made a couple of modifications to the original plan including adding a center fuel tank, landing lights mounted on the landing gear, and a customer air induction filter with alternate air. In addition, this plane holds a Chelton Flight Systems EFIS.

Flying N 18GG are Rob Logan and Mike Mahar. Rob Logan soloed in June 1988, then bought a CGS Hawk Ultralight in February 1994. He received his pilot's license in October 1996; shortly thereafter he purchased an American General Tiger. In 1998, Rob received his IFR rat-



### Lancair Legacy

ing. He has previously raced in the 2003 and 2004 Sun 100 races.

Mike Mahar soloed in 1957 and now has his multi-engine instrument license with over 3,000 hours of flight time. He has built two Lancair Legacy 2000s and one Lancair IV-P. This is the first AirVenture Cup for both pilots.

<b>Top Speed:</b> .....260 MPH	<b>Engine:</b> .....Lycoming IO-550	<b>Empty Weight:</b> .....1,500 Lbs.
<b>Range:</b> .....1,300 Miles	<b>Displacement:</b> .....550 Cu. Inches	<b>Gross Weight:</b> .....2,500 Lbs.
<b>Fuel Capacity:</b> .....70 Gallons	<b>Horsepower:</b> .....300	

# 17<sub>Formula RV</sub>

## Larry & Jim Klusmier

Race # 17 is an Van's RV-6A built by Larry Klusmier of Germansville, PA. This white and green RV-6A is IFR equipped with dual nav/coms and a GARMIN GPS. It is powered by a 160 horsepower Lycoming O-320-E2D engine turning a wooden fixed-pitch propeller. Construction was completed over a four and 1/2 year period in Larry's basement, garage and completed in his hanger. Because of a job change of the builder, construction took place in two states and three different residences. It was first flown on October 8th, 1995 and has since accumulated over 500 hours of flight time. Larry adds that this airplane was built to enjoy, experience and share the freedom of flight with others.

Flying race 67 is the team of Larry and Jim Klusmier. Larry is a mechanical engineer with 5 patents in the field of cryogenics. Larry earned his Private Pilot Certificate in 1988. He started flying in a



### RV-6A

Grumman AA1B and later flew Cessna 172s and Piper Cherokee 180s. Recently Larry earned his instrument rating in the RV-6A.

Larry's co-pilot is Jim Klusmier who is a dentist from Long Beach, CA. Jim earned his private pilot certificate last August and is now in IFR training. He plans to begin building an RV-10 in the near future.

<b>Top Speed:</b> .....180 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Empty Weight:</b> .....1,037 Lbs.
<b>Range:</b> .....900 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Gross Weight:</b> .....1,650 Lbs.
<b>Fuel Capacity:</b> .....36 Gallons	<b>Horsepower:</b> .....160	

# 33<sub>Formula RV</sub>

## Robert Murdoch

Race #33 is a yellow, black and gray RV-6. This aircraft was built by the pilot, Robert Murdoch in his hometown of Oklahoma City, OK. It took 38 months to build and was built according to the plans with minor modifications. The only modification was to install a throttle quadrant and set-up so that the plane could be flown from the right seat.

Flying this RV-6 is Robert Murdoch. Robert entered the Air Force pilot training at age 19. He was flying T-33s by age 20 and instructing in jets by 21. He retired as Lieutenant Colonel after 25 years, receiving the distinguished Flying Cross, he flew 187 combat missions over North Vietnam in a B-66. Since his retirement from the Air Force, Robert has



### RV-6

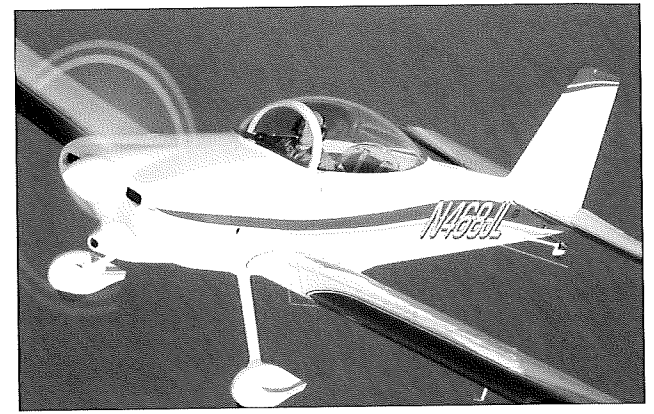
been chief pilot for two corporations. He has accumulated 14,500 hours of flight time. This will be Robert's first AirVenture Cup.

<b>Top Speed:</b> .....189 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Empty Weight:</b> .....1,060 Lbs.
<b>Range:</b> .....700 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Gross Weight:</b> .....1,600 Lbs.
<b>Fuel Capacity:</b> .....38 Gallons	<b>Horsepower:</b> .....160	

# Formula RV

The Formula RV class is open to any stock Van's Aircraft RV-3, 4, 6, 6A, 7, 7A, 8, 8A, 9 or 9A.

13	John Huft	RV-8
17	Larry & Jim Klusmier	RV-6A
33	Robert Murdoch	RV-6
34	Chris Murphy & James Achord	RV-4
44	Brent Anderson	RV-4
48	Dave Weisgerber	RV-6
53	Scott & Wendy Gesele	RV-6A
55	Jim & Josh Norman	RV-6A
56	Scott Jordan	RV-8
63	Bob Vasey	RV-3
72	Bobbi Boucher	RV-4
74	Scott Spencer	RV-4



Velocity XLRG



## 24<sup>Sport</sup> Rich & Rick Guerra, Jr.

Race #24, this white with red and blue trim Velocity XL RG was built by Ricardo Guerra, Jr. over a period of about 2 years, and had its first flight in December 2001. One unusual feature of this airplane is that it is equipped with small video cameras that are built into the lower winglets which can record the scenery flying around the country. The Velocity is also well equipped for Cross Country Flying with an instrument panel that includes a Sandel SN3308 HSI, a Garmin MX20 and GNS 530 GPS/NAV/COM system. To help on the long flights the airplane is also equipped with an S-Tec S-50 Autopilot.

Powered by a Lycoming IO-540, 260 horsepower engine turning a 3 blade, MT constant speed propeller giving it a top speed over 200 mph.

Ricardo "Rich" Guerra, Jr. is an instrument rated private pilot who is looking forward to his first racing experience at the 2004 AirVenture Cup. He has over 500 hours of flight experience with the last 150 hours being in his Velocity criss-crossing the country, which has been a dream-come-true for Rich. When not flying, he works as an interventional cardiologist and will be joining a new practice, the North Texas Heart Center in Dallas, TX, this August. Rich indicates that his Velocity has enriched his life beyond measure, spurred him to face new challenges and to explore new spheres of knowledge. He is taking his parents to Air Venture 2004 as a gift to them for teaching Rich that "If you can dream

it, you can achieve it." Flying co-pilot in Race #24 is Rich's dad, Ricardo "Rick" Guerra, Sr. Rick is retired after spending 37 years with the LAPD, last serving as Senior Automotive Supervisor responsible for the 20 divisional police fleet maintenance garages. A master mechanic, he has found a second career working on this Velocity. He often travels across the country in this plane with his son. At age 72, he is contemplating pursuing his private pilot certificate. When not flying, Rick can be found gardening, fixing various relative's cars, or babysitting his numerous grandchildren. This will be the first AirVenture Cup for both Rick and Rich.

<b>Top Speed:</b> .....215 MPH	<b>Engine:</b> .....Lycoming IO-540	<b>Empty Weight:</b> .....1,776 Lbs.
<b>Range:</b> .....1,000 Miles	<b>Displacement:</b> .....540 Cu. Inches	<b>Gross Weight:</b> .....2,700 Lbs.
<b>Fuel Capacity:</b> .....82 Gallons	<b>Horsepower:</b> .....260	

## 13<sup>Formula RV</sup> John Huft

N184JH is a red RV-8 with gold flames that was built by the owner/pilot, John Huft. John started working on his RV-8 in January 1999 and made his first flight in October 2002. This airplane was modified from the original plans by the builder by creating hidden hinges for the baggage compartment and oil door, a 3-position canopy lock which operates from the baggage compartment, and a control lock. All of the antennas except for the transponder have been hidden in the design. This airplane won outstanding workmanship at Oshkosh 2003 and Reserve Grand Champ at Copperstate 2003.



RV-8

ly in the Sun 60 and Sun 100. In addition he raced in the Denver to Jackpot, NV race where he won first place in the fixed gear category in 2003.

John Huft holds a commercial license with single and multi engine as well as land and sea ratings and a CFII. John is an electrical engineer. This will be his first AirVenture Cup. However John has raced previous-

<b>Top Speed:</b> .....210 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Empty Weight:</b> .....1,075 Lbs.
<b>Range:</b> .....800 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Gross Weight:</b> .....1,800 Lbs.
<b>Fuel Capacity:</b> .....42 Gallons	<b>Horsepower:</b> .....180	

## 50<sup>Sea Sport</sup> George & Joan Osborne

This Seawind 3000, Race #50, was built by George Osborne, of Berwyn, PA over a three-year period, from a kit purchased from SNA. The kit plans were followed very closely, with a few additions to enhance comfort and safety. Those additions include a built-in oxygen system, a fire extinguisher system, and an engine pre-heater system to aid in starting in cold weather. The airplane also incorporates a few features unique to its amphibious mission. It is equipped with a depth finder for on-water operations, and a built in cleat for mooring something its land-based counterparts don't have to worry about! Even though it is an amphibian, the airplane has a little "racers" touch with a unique water rudder tail fairing to close the opening between the air rudder and the fuselage. The airplane was first flown on Valentines Day, 2003 as the 57th Seawind to fly. It was recognized at the Sun N Fun 2003 as the Best Composite Amphibian. This AirVenture Cup will be the second race for this airplane, having flown in last year's AirVenture Cup.

The husband and wife team of George and Joan Osborne are flying Race #50, having flown together in last year's race as well. George is an audiologist and Dean of the PCO School of Audiology. He has been a



Seawind 3000

pilot for more than 30 years. Together with his family, George has flown to almost every state in the country, from the Florida Keys, to 500 miles north of the Artic Circle. He aspired to build an airplane since 1980 a dream he realized when he test flew the Seawind earlier this year. Flying with George is his wife Joan. Joan is a Sports Physiologist, runner and owner of the Running Place, a specialty running shoe store in Newtown Square, PA. She will be sorting out the charts for the flight. George and Joan have two married children and two lovely granddaughters.

<b>Top Speed:</b> .....200 MPH	<b>Engine:</b> .....Lycoming IO-5400	<b>Total Time on Aircraft:</b> .....50 Hrs.
<b>Range:</b> .....1,100 Miles	<b>Displacement:</b> .....540 Cu. Inches	<b>Empty Weight:</b> .....2,706 Lbs.
<b>Fuel Capacity:</b> .....74 Gallons	<b>Horsepower:</b> .....300	<b>Gross Weight:</b> .....3,600 Lbs.

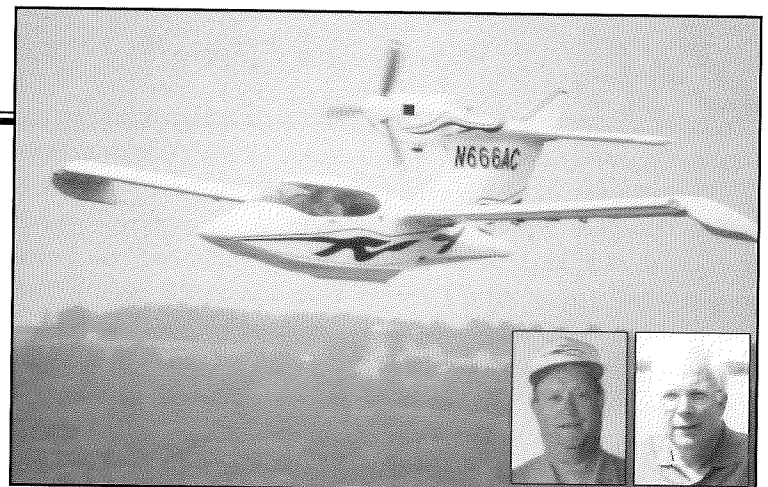
# 60

Sea Sport

## Art Culver & Tiger Maguire

Race #60 is a Seawind 3000, and was the first amphibian to participate in the AirVenture Cup Race when it entered in 2001. Built from a kit by Art Culver, the airplane has won a number of awards including Reserve Grand Champion Seaplane at Oshkosh 2000, the Stan Dzik award for outstanding design contribution at Oshkosh 2001, and was the Grand Champion Seaplane at Sun n Fun 2002. It was also the first place home-built at the EAA Virginia State Fly-In 2001. The airplane was test flown on April 26, 2000. The engine compartment is equipped with a fire detection and protection system designed by Art, which won him the Stan Dzik Award. To aid in engine cooling, cowl air scoops were added. A unique feature of this Seawind is a computer controlled flap selection system. The airplane was built over a 10-year period at a cost of \$150,000.

Race #60 is being piloted by its owner/builder Art Culver. The 2001 AirVenture Cup was the first race for both pilot and airplane. Art is a retired airline pilot and former US Navy Carrier pilot. During his Naval Aviation career, Art flew 122 combat missions in an A-4 Skyhawk from aircraft carriers. He holds an Airline Transport Pilot License with single and multi-engine land ratings. In addition to take full advantage of the



**Seawind 3000**

Seawind's amphibious capabilities, Art also holds a single engine seaplane rating. He is type rated in the Boeing 727, 757, and 767 as well as the DC-9. Art was instrumental in the formation of the new SeaSport Class in 2002.

Flying with Art this year is Tiger Maguire. Tiger is recently retired from a major computer company. He graduated from Penn State University in engineering. He served in the US Army during 1968-1971 as a flight engineer on a CH37 and CH47 Helicopter. This is Tiger's second race experience.

<b>Top Speed:</b> .....190 MPH	<b>Engine:</b> .....Lycoming IO-540	<b>Total Time on Aircraft:</b> .....380 Hrs.
<b>Range:</b> .....900 Miles	<b>Displacement:</b> .....540 Cu. Inches	<b>Empty Weight:</b> .....2,700 Lbs.
<b>Fuel Capacity:</b> .....74 Gallons	<b>Horsepower:</b> .....300	<b>Gross Weight:</b> .....3,500 Lbs.

# 80

Sea Sport

## Keith Walljasper

Race #80 is a Seawind 3000 built and flown by Keith Walljasper of Normal, IL. Built over a 6 year period, taking more than 4,200 man-hours of work to complete. The aircraft was built according to the plans, with only a few modifications. Among the unique features of the aircraft include an electric canopy lift, a canopy security system, hydraulic nose wheel steering and a fire detection system. To aid in engine cooling, the cowling features air outlet scoops. The cowl inlets were modified to decrease cooling drag. One of the unusual features of this Seawind is the Dolphin painted on the side, to commemorate the first flight from Dolphin Aviation in Sarasota, Florida on April 1, 2001. The aircraft's registration number, N80CC, is in honor of Keith's late brother, Charles.

Keith Walljasper is flying Race #80 for his 3rd year in the AirVenture Cup. Keith has been interested in aviation his entire life. He started



**Seawind 3000**

building model airplanes during his school years, and later took flying lessons at Ingersoll Airport in Canton, IL, from an instructor, Stephen Nagel, who would later become an astronaut and fly the space shuttle. A retired toolmaker, Keith spent 37 years with Case/International Harvester. Since his retirement, Keith has spent 10 years as a general contractor.

<b>Top Speed:</b> .....200 MPH	<b>Engine:</b> .....Lycoming TIO-360	<b>Total Time on Aircraft:</b> .....280 Hrs.
<b>Range:</b> .....1,200 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Empty Weight:</b> .....2,700 Lbs.
<b>Fuel Capacity:</b> .....74 Gallons	<b>Horsepower:</b> .....180	<b>Gross Weight:</b> .....3,600 Lbs.

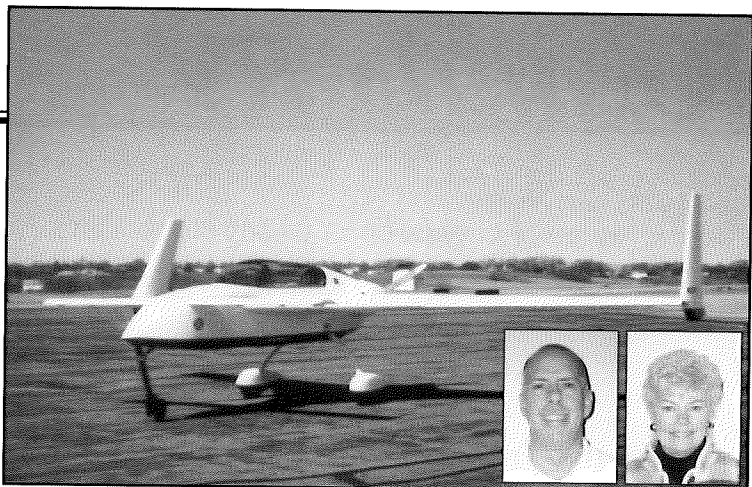
# 99

Formula FX

## Kerry & Carol Fritz

Race # 99 was built by Kerry and Carol Fritz from plans over a period of 16 years while raising a family. Their youngest daughter was 8 years old when they started in 1982. By the time they had completed their Long-EZ and made their first flight in 1998, Kerry and Carol had 2 daughters married, gained 2 son-in-laws and 5 grandchildren, and their youngest daughter was in her last year of college!

Kerry and Carol put a lot of effort into building their plane and enjoy flying it around the country. They have shown their Long-EZ at events around the area. Kerry and Carol flew together in the 2003 AirVenture Cup as their first race experience. Kerry started flying in 1969 on the GI Bill and earned his commercial, multi-engine and instrument ratings. He



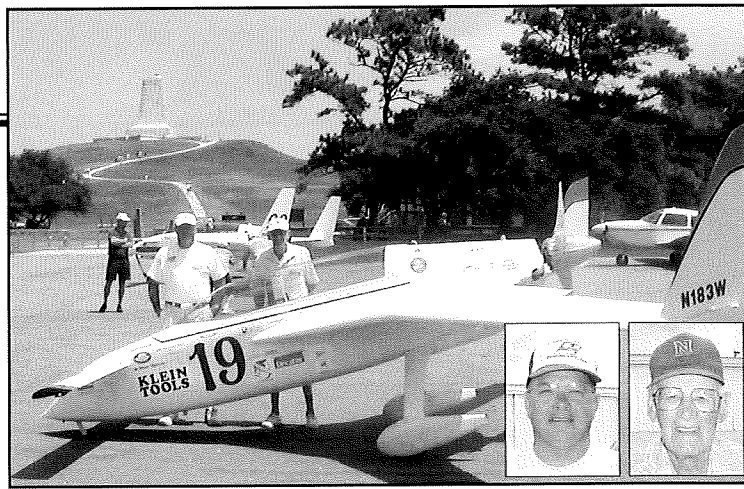
**Long Ez**

is a retired truck driver, flies for pleasure and also enjoys flying Young Eagles. Carol is a retired electronics inspector, helped in the construction of the airplane, and enjoys flying along with Kerry.

<b>Top Speed:</b> .....180 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Total Time on Aircraft:</b> .....235 Hrs.
<b>Range:</b> .....800 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....917 Lbs.
<b>Fuel Capacity:</b> .....50 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,575 Lbs.

# 19 Formula FX William Oertel & Gaus Cadwell

This white and blue Vari-EZ, Race #19, has several unique features. William built this aircraft over a period of 6 years finishing in May 1984. He created his own design of an electronic nose lift (which was the first powered nose lift for canard aircraft), installed a mountain high oxygen system, and designed his one custom instrument panel which features an I-K 2000 EIS. This plane also had baggage pods and a larger than standard fuel capacity. William has flown in several races since 1985; mostly races of about 125 miles, flown at 7000 feet over a pre-selected course. He has many hours of formation experience in this aircraft including airshows in Guadalajara, Mexico in the early 90s. N183W has been on many cross-country trips beginning in California and going to Illinois, Alabama, Florida, 7 times to Oshkosh and Mexico every year since 1989. William Oertel and Gaus Cadwell are flying Race #19; they also flew together in the 2003 AirVentureCup. William began flying in 1961 while in an A&P program. He learned to fly in an Aeronca Champ followed by the Tri Champ, Cessna 150, and moving up from there. William has total hours flown of almost 2,500 including 200 hours of formation flying, including airshows. Gaus graduated from the University



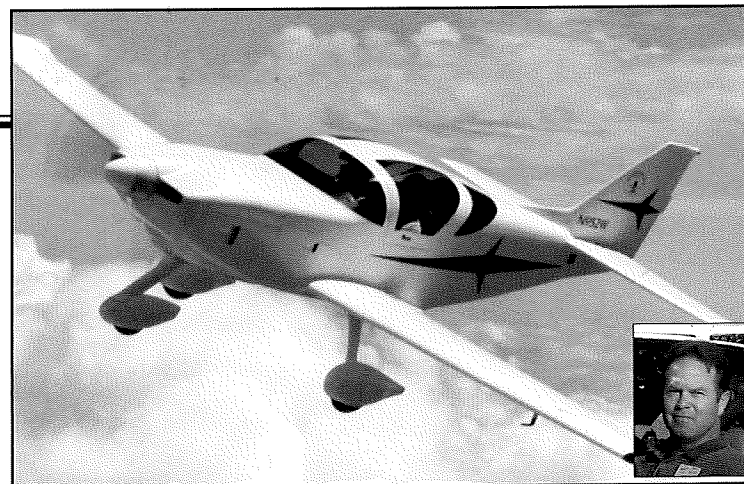
**Vari Ez**

of Nebraska in 1941 and worked for Wright Aeronautical in 1941-42. He then served in the US Army Corp of Engineers from 1942-1946. Upon returning from the War, Gaus went back to Wright Aeronautical until 1949. He then worked on engines for the X-15 at Reaction Motors until 1962. In 1962, Gaus began working for North American Rockwell as a propulsion engineer on the Apollo program and the space shuttle until he retired in 1983. Gaus acquired his private license in 1976 and has acquired almost 1,500 hours.

<b>Top Speed:</b> .....200 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Total Time on Aircraft:</b> .....2,060 Hrs.
<b>Range:</b> .....800 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....910 Lbs.
<b>Fuel Capacity:</b> .....33 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,350 Lbs.

# 52 Formula FX Don Saint

Race #52, this red and white Glasair II can carry two people non-stop for 1,100 miles. The airplane has a top speed of 225 miles per hour, on 180 horsepower. First flown on December 6, 1997 the airplane has been improved and modified since. Don has added Wheel fairings from Van's Aircraft, extended range fuel tanks, one of a kind winglets and wing tip extensions as well as slotted flaps, and a 12-gallon header tank in the fuselage. Possibly the most important improvement was lengthening the baggage compartment to fit two full-sized golf bags. Well equipped for long cross county flights, the Glasair even has a built-in Sony CD player. The airplane features a full IFR instrumentation including a Garmin GPS coupled to the airplanes autopilot. Flying race number 52 is Don Saint. Don is a systems engineer for Lockheed Martin in Texas. He is also a commercial single engine and multi engine instrument rated pilot. In addition he is an active Certified



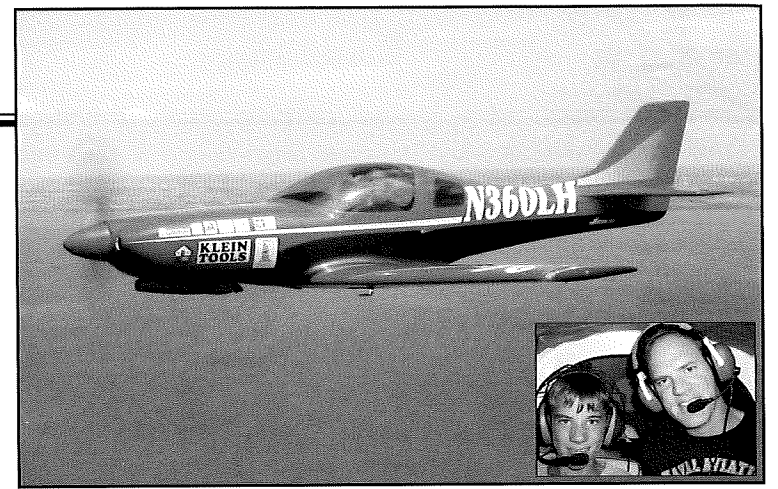
**Glasair IISFT**

Flight Instructor. Don has over 2500 hours of flight time in small aircraft. In addition to the construction of the Glasair, Don also built the gear well fuel tank in the Polen Special. Don has raced in the AirVenture Cup Race each year since 1999. He has also competed in the Sun 100 Race for several years as well as Copperstate. Recently he has been in several local races including Fast Movers and the Pecan Sprint.

<b>Top Speed:</b> .....225MPH	<b>Engine:</b> .....Lycoming IO-360	<b>Total Time on Aircraft:</b> .....800 Hrs.
<b>Range:</b> .....1,100 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Empty Weight:</b> .....1,170 Lbs.
<b>Fuel Capacity:</b> .....55 Gallons	<b>Horsepower:</b> .....180	<b>Gross Weight:</b> .....2,200 Lbs.

# 36 Formula RG Larry & Nicholas Henney

N360LH first flew on December 8, 1998. This Lancair 360 was built by Larry Henney of Ft. Worth, TX. Flying as Race 36, this Lancair is powered by a Lycoming IO-360, is red lined at 270 mph, and consistently publishes race speeds of 250 mph. Unique speed enhancements to N360LH include dual Lightspeed Engineering electronic ignition, direct ram intake air, numerous cooling air drag reduction modifications, and ceramic coated exhaust pipes. The 2004 AirVenture Cup will be the 10th race for N360LH. With 4 children and only a two-seat aircraft, Larry has flown over 500 hours coast to coast to find racing opportunities to fly with his children. While each race has unique classes, Race 36 has always placed in the top 3. N360LH holds 3 first place trophies and is unbeaten by any Lancair 360. As Larry says, "normally aspirated aircraft can't hold a candle to this rocket". Flying Race 36 is the father and son team of Larry and Nicholas Henney. Larry has a degree in mechanical engineering from the University of Texas. The US Navy taught Larry to fly where he served for 10 years as an instructor pilot in the F/A-18 Hornet. He is presently a pilot for a major US airline flying the Airbus A300. Larry's hobbies include work as both a Flight Advisor and Technical Counselor, flying Young Eagles, and currently Larry is building a Lancair ES. All these addictions have become more accessible since his recent move to Pecan Plantation Airpark located southwest of Fort Worth, TX. The navigator and time keeper for race 36 is Larry's oldest son Nicholas Henney. This veteran air racer has assisted his dad in the 2001 Sun 100,



**Lancair 360**

2002 AirVenture Cup, and the 2002 Golden West Air Race. Nicholas is entering the 7th grade and while not racing enjoys boating, fishing, and launching water balloons across the airpark. Dad is fretting over weight concerns this year because Nicholas gained 20 pounds since they last raced (it's all muscle). Larry is looking forward to this year's race, as he says "This year's race to watch is a grudge match between Mark Ravinski, Race 77, and my Race 36. This will be the 4th meeting between these two arch rivals. These aircraft are so closely matched that only the shade of red paint differentiates them. Last year's 1000 mile course allowed me to edge out Mark by merely 2 minutes. The post race fun meter will be pegged again this year with intense heckling."

<b>Top Speed:</b> .....270 MPH	<b>Engine:</b> .....Lycoming O-360	<b>Empty Weight:</b> .....1,157 Lbs.
<b>Range:</b> .....1,000 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Gross Weight:</b> .....1,685 Lbs.
<b>Fuel Capacity:</b> .....58 Gallons	<b>Horsepower:</b> .....180	

# 77 Formula RG Mark & Paul Ravinski

This red and gold Lancair 360 was built by James Brown in Kansas City, Missouri. Capable of carrying two people over 900 miles non-stop, this airplane has a top speed of 250 miles per hour. It is powered by a 180 hp Lycoming IO-360B during a Hartzell, constant speed propellor. N360KB has been flown by Mark in 5 previous AirVenture Cups and 4 Sun 100 races. Flying Race #77 is Mark Ravinski of Assonet, Massachusetts. Mark is a commercial pilot with single and multi engine ratings as well as his CFI. He has over 2,300 hours of flight experience and is also an IA mechanic. From 1974 to 1977, Mark was an Air Force flight instructor. He instructed for more than 1,000 hours in a T-37. This will be Mark's 6



**Lancair 360**

AirVenture Cup and he has taken several of his children as co-pilots in each of these races. This year his co-pilot will be his son Paul who was also his co-pilot in the 2002 AirVenture Cup.

<b>Top Speed:</b> .....250 MPH	<b>Engine:</b> .....Lycoming IO-360	<b>Total Time on Aircraft:</b> .....1,000 Hrs.
<b>Range:</b> .....940 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Empty Weight:</b> .....1,090 Lbs.
<b>Fuel Capacity:</b> .....53 Gallons	<b>Horsepower:</b> .....180	<b>Gross Weight:</b> .....1,685 Lbs.

This blue and white Lancair 320, Race #94, was built by Scott Krueger over 7 years. N92EX includes a spring-bias trim system and automatic fuel management system. N92EX has won several awards including the 1998 OSH EAA Outstanding Workmanship award, 1999 Sun'N'Fun Outstanding Aircraft award, various fly-in awards and, the 2002 Sun 100 Lancair 320 Class 1st Place at 202 knots.

Flying Race # 94 is Scott Krueger, relying on his experience from the 2003 AirVentureCup to turn in a faster time this year. Scott is retired from the computer software business. He contends that his life began after he and his partner sold their business. Scott had previous interest in aviation so decided to buy a slow build kit and started taking flying lessons about the same time. Over the 7 years it took Scott to build his Lancair, he used his "spare" time to build time in Cessna 152s and 172s



**Lancair 320**

as well as over 1000 hours in a Skymaster while earning his multi-engine, instrument, and commercial ratings along the way. Having a great interest in high-speed personal transportation, when he is not flying Scott also drives a C5 Corvette and rides a Honda 1800 VTX (V-Twin Xtreme) 1800cc cruiser Motorcycle.

<b>Top Speed:</b> .....220 MPH	<b>Engine:</b> .....Lycoming IO-360	<b>Total Time on Aircraft:</b> .....700 Hrs.
<b>Range:</b> .....1,000 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....1,215 Lbs.
<b>Fuel Capacity:</b> .....43 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,800 Lbs.

This blue and white Lancair 360, Race #96, was built by the pilot, Arnold Christen of Mineral Point, WI, over 5 1/2 years in his hangar. This airplane first flew in June 1996 and was completed for the Oshkosh 1997 show where it received an award for outstanding workmanship. This Lancair was built according to the plans and has a Lycoming IO-360 engine.

Arnold Christen is flying Race #96. Arnold is a commercial, instrument pilot who has been flying for 28 years, all of it for pleasure. He has flown over every state in the continental United States with the exception of the New England states. Arnold has previous race experience having raced his Lancair at the North Central EAA race, Sterling-Rockfalls in 2000 where he finished first in the 93 mile open class race with an aver-



**Lancair 360**

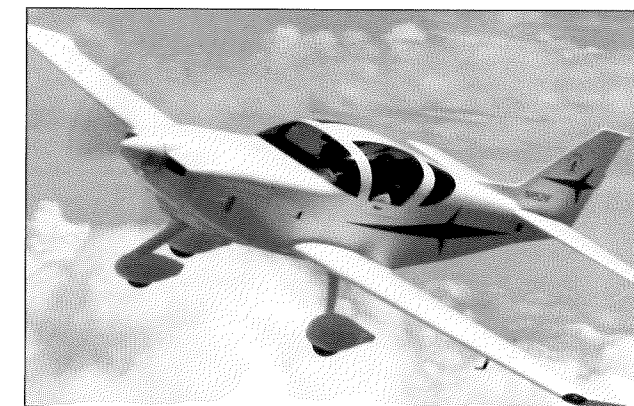
age speed of 236 miles per hour. He also raced at the Sun 100 in 2001 where he placed 2nd, and in October 2003 raced in the Lancair Cross-Country Race in Redmond, Oregon where he placed first. However this will be Arnold's first AirVenture Cup.

<b>Top Speed:</b> .....255 MPH	<b>Engine:</b> .....Lycoming IO-360	<b>Total Time on Aircraft:</b> .....520 Hrs.
<b>Range:</b> .....1,150 Miles	<b>Displacement:</b> .....360 Cu. Inches	<b>Empty Weight:</b> .....1,100 Lbs.
<b>Fuel Capacity:</b> .....43 Gallons	<b>Horsepower:</b> .....180	<b>Gross Weight:</b> .....1,685 Lbs.

# Formula FX

The Formula FX class includes any experimental category aircraft with an engine displacement of 360 cubic inches or less, with at least two fixed landing gear.

- |    |                                |               |
|----|--------------------------------|---------------|
| 15 | Tim Freeze                     | Cozy III      |
| 19 | William Oertel & Gavis Cadwell | Vari Ez       |
| 52 | Don Saint                      | Glasair IISFT |
| 73 | Steve Hammer                   | Glasair ITD   |
| 78 | Jay Blum                       | Long Ez       |
| 91 | Bruce Hammer                   | Glasair I TD  |
| 93 | Rich Lamb & Joseph Conlon      | Long Ez       |
| 99 | Kerry & Carol Fritz            | Long Ez       |



Designed by Nat Puffer, the Cozy is a Side-by-Side seating version of the Rutan Long-EZ. Race #15 is a Cozy Mark III built by Tim and Wendy Freeze of Fishersville, Virginia over a period of 5 years in a farm shop. A true family project, Tim and Wendy built the aircraft together and the registration number N215TW is their wedding anniversary and their initials! On of the unique things about the Cozy project is the fact it was scratch built from plans by the Freezes and not from a kit. The Cozy was first flown May 1, 2001. It features electric pitch trim, an electric retractable nose gear, a retractable entrance step, and a retractable landing light. All of these changes were made to reduce drag. The Cozy is equipped with an IFR instrument panel including a panel mounted GPS. The instrument panel is custom made out of burled Carpathian Elm. It was the first Cozy to participate in the AirVenture Cup when it entered for the first time in 2002.



**Cozy III**

Race #15 is piloted by Tim Freeze, an electrical/mechanical engineer in a research lab for Dupont. Tim holds a Commercial Pilot Certificate with Single and Multi-engine ratings as well as an instrument rating. He has more than 1,400 hours of flying time. In addition to the Cozy, Tim also flies a Beech 35 Bonanza and a Fisher Celebrity Biplane which he helped build. He is also a licensed A&P Mechanic and maintains all three aircraft. This will be Tim's 3rd AirVenture Cup.

<b>Top Speed:</b> .....200 MPH	<b>Engine:</b> .....Lycoming O-320	<b>Total Time on Aircraft:</b> .....150 Hrs.
<b>Range:</b> .....1,000 Miles	<b>Displacement:</b> .....320 Cu. Inches	<b>Empty Weight:</b> .....1,050 Lbs.
<b>Fuel Capacity:</b> .....50 Gallons	<b>Horsepower:</b> .....160	<b>Gross Weight:</b> .....1,950 Lbs.