

CIRRUS BUILDERS ASSOCIATION

Published By Rick Mills & Tom Logan

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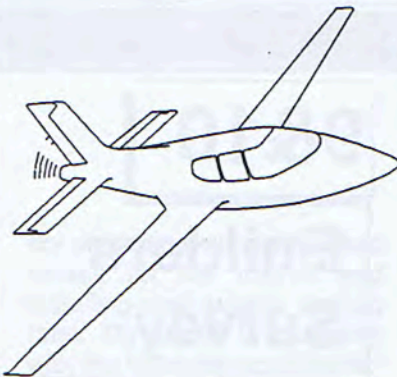
First Issue !

By Tom Logan.....N95TL

Since this is the first issue of the Cirrus Builders Association newsletter, it is important to define the Association's purpose and also to define what it is not.

The Association is intended to be an information transfer media which will facilitate the direct communication between individual Cirrus builders. That means that there is no intent by the newsletter coordinators (Rick Mills and Tom Logan) to edit any information, to endorse any product or equipment, or make any judgments on any builder's project. Articles or other news items will be published in their full, original text with the author identified. We hope that by providing each association member with an idea of what other builders are doing, we will eliminate some of the "think and search" that we all have to do. We encourage each association member to get to know the other members and thus speed all kit construction. We leave it to you to contact an article author directly to find out how something has been done.

It is important to state that the Association is not a technical reference for Cirrus kit parts, or construction or aircraft operation manuals supplied by Cirrus. *Cirrus Design is the sole and final authority on these items.*



The cost of publishing the newsletter through 1994 is funded by cash contributions from Al Corey, Tom Logan, Cy Mehling and Rick Mills. Rick is publishing the newsletter using his computer, laser printer, AutoCad and Microsoft Publisher programs.

We hope you find the rest of this newsletter to be of value and that you will support it by providing the newsletter with information on your own progress.

In the Next Issue

Article by Don Lewis on

Inside January 1994

installing the Allison jet engine.

More component vendors

Article on surface finishing problems and some solutions by Tom Logan.

More builder proposed instrument panel layouts.

Tom Logan

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Builders News

By Rick Mills.....N95RM

Direct communication between Cirrus builders is what Builders News column is all about. Your first Builders News article should include a brief introduction to all members. When or how did you first learn about the Cirrus.

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Instrument Panel Design

I think everyone would like to know how long you have been working on your Cirrus and when you hope to finish. How many hours a month do you spend on your Cirrus???. Are you building it at home, a shop or at the airport.

Describe the panel you plan to build, if you are that far. What engine are you going to install? Be as detailed as you like, we all want to know.

If you have a computer available I would prefer receiving your article on a 3 1/2" disc. (ASCII text format IBM Compatible, most popular word processors programs such as Microsoft Word, WordPerfect, Wordstar etc.

If a word processor is not available, typed or hand written is ok.

Note:

Instrument Panel Design !

We would like to include your instrument panel design in the next issue. Send a sketch of your panel, listing all the equipment by model number, ie.

(King KX 155 NAV COMM)

Print clearly!!!!!!

9&10

Builders Survey

Please fill out the Builders Survey form on page nine and ten. Copies will be sent to all association members. Feel free to add additional information! Be specific with engine information, other builders may want to talk to you about a specific model.

What percentage of each section have you completed. Other builders may have suggestion for you that could save you time???

Do you want us to publish your name and phone number in the association members list. If not we will remove your name from the membership mail list.

Please list the avionics you are using, or plan to use. Even if it's a wish list, it will be helpful to other builders.

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Suppliers & Components

This section will be an on going builders directory of accessories and components for the Cirrus. Not just electronic components, any hard to find part or component should be listed. Give the name of the part, part number, description of the function and the source. Please use the format illustrated on page 11.

This will be a valuable directory for all builders.

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Member List

After we receive the builders survey we will up date the membership list and distribute to all members. If you do not want your name address and phone number given out let me know I will delete it from the mail list.

Builders News



Al Corey Near First Flight

By Al Corey.....N7033G

The first time I saw the Cirrus was in an EAA article spring of 1988. I took a trip to Cirrus Design in October of 89 (Baraboo WI). I had a demo ride in Proto I with Dale Klapmeier (VK30). I enjoyed the demo flight, took a tour of the factory and bought the kit.

I received my Horizontal kit Nov. 1989. The manuals were not as good as they are now but with a few phone calls I completed the horizontal kit.

The wing and fuselage kits were shipped Jan. 1990.

I work as much as 30 hours per week except during the summer, boating and motor cycle trips get in the way.

I had to rebuild some parts because of mistakes or changes in the instructions. The manuals at first were faxed to me or instructions given over the phone. The manuals now are much improved.

My airplane is almost finished except for the interior and installing new electric cooling fans. My panel is complete with the following equipment.

MA-24 Audio Panel

Ky 196 Com. Radio

KX 155 Nav. Com

KLN-88 Loran

KT76-A Transponder

KI 525-A HSI

KI 525 Indicator

KN-62 DME

Inter Vox (Northern Airborne Tech.) Intercom
Narco (ELT)
Lamar instr. lite dimmer
Lamar Alt. Control
West Berg Mfg. Gages,
OAT, Cyl Temp., Amp.,
Oil temp., Fuel Pressure, Oil pressure.
Tiger Avionics Master Switch.
Sigtronics Volt meter
Whelen lights
Precise Flite - Speed Brakes
Stec Auto/pilot

Engine-Continental IO 550-G

Paint- White / Blue stripe with a gray shadow under the stripe.

I hope to move the Cirrus from my shop to the hanger (Lapeer; Dupont, Lapeer, Michigan D95) April of 94 and first flight June 94. I have enjoyed building the Cirrus, it's been alot of work.

I will have to say the people at Cirrus have given it their all. I wish this builder news letter would have been around when I was building, it might have saved some rebuild time.

If anyone has any questions you can call me at my shop 313 797- 4573

Al Corey

Builders News



Cy & Jim Mehling

By Cy Mehling.....N94CM

13 NOV '93

Dear Rick and Tom-

You are to be commended for organizing this newsletter. All us builders out here have been isolated, with only sporadic info and a phone call now and then to keep in touch with a few other builders. Mostly we hear little things from someone at the factory. We are really looking fwd to hearing it right from the horse's mouth.

My first contact with a Cirrus was at Sun 'N Fun a number of years ago. I saw it from a distance on the ramp and refused to go look at it, I was sure it was the defunct Prescott Pusher.

I think it was in Sport Avn later that it caught my eye. Sent for info and ordered the kit, subject to a demo ride after OSH that summer. Ordered it at the time to take advantage of a pending price inc. My partner at the time (not Jim, my son and present partner) and I went to the factory and Dale gave us a nice demo ride and tour of the place. Within a month my partner

backed out. This was a disaster as he had the building we were going to use for assembly. I was lamenting this fact to the fellow I was helping to build his Glasair III at the time and he offered me his shop free of charge since I had helped him for 2« yrs. I said that it would be great, we could assemble it fully in his shop, except the ceiling was too low. He said "you will just have to cut a hole in the ceiling for the tail". I then offered the partnership to Jim and we were off and running.

Our Kit ser no. 9105 arrived in late Feb '91 as promised. We went right to work. I worked 40 hrs/wk, every day for over 2 yrs, Jim worked a couple nites a week and some on weekends for a total of about 6000 hrs. We did everything except upholstery. We completed all we could in this barn about 20 minutes from Doylestown airport, including full assy, complete avionics and elec sys and painting. We did not operate the Landing Gear or Engine, nor fuel the airplane. We took it apart and moved to the airport Jan 20, '93. My 12 EAA friends assisted in transporting on a low flat bed trailer and we assembled it on a ramp, as there was not a big enough hangar available on the airport. By dusk, I was towing it to our hangar for the first time using our new gas powered towbar.

We went right to work and the final assy, reinstalling the engine, finishing the wing fillets, operating the landing gear etc. I spent about 3 months repairing fuel tank leaks,

the center section on the bottom was pin holed extensively. All four fuselage attach fittings leaked also. With the factory help, these were all taken care of

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and FAA signoff came in June. We had a severe oil leak in the tail housing and had to cool our heels for a month while that went back to Cirrus and they sent it out for repair. Jim describes our first flt in July for public consumption (as you always read in Sport Avn) as follows: Much easier to build that Cirrus said, Flew hands off and got off the runway faster than advertised., climbed better than expected, cruised faster on lower power than Cirrus promised and landed easily like a kitten. In reality, it was pretty exciting. When we levelled off in cruise it felt like a bucking horse. We discovered the speed brakes were jumping up and down and we could not get them down. After a bit of exhilaration, we headed for home to find that Jim could not get the nose down and slow down as we were used to in proto II. We must have landed at about 95kts, but managed to stop it in 3000'. We later discovered we had landed without flaps, the c/b had popped and our indicator was inop.

We have since of course been working constantly to get all the bugs out. I am presently building new ailerons to overcome the roll heaviness caused by the lower concave surfaces. This was one of those unfortunate things that came about, because I was never told

Builders News

about the change, Doug or Dennis was here during construction and noted I had the "old style ailerons". The airplane was painted already and I refused to build new ones, until we flew it and found it was just unacceptable, takes two hands to roll to a new heading.

We had to return the tail housing for the same leak in the fwd seal, could not bleed the brakes and get a hard pedal until we replaced the brake lines with #3 lines from the wing to the wheel. Don't forget to lengthen the push rods to the master cyl's for better pedal position. The brakes will never get hard, they are a bit spongy, but work just fine, stopping power is excellent. We recommend a fixed tab on the rudder to care of any minor out of trim the builder built into the entire airframe. In a future letter we will tell you about our first international trip to Ottawa, Canada where we picked up a load of ice.

We have N94CM equipped as follows:
Cont IO-550G we use 2700RPM for T/O, but use 280hp for climb and cruise settings- get 188kts TAS, 13gph at 8000' MT PROP Century vac driven HSI, King 165 navcom, GS etc. 196 com, xpdr and MKR rcvr with panel. Magellan GPS, Apollo 618TCA with enc connected for vertical nav as well as altitude select and warning. GPS and VOR/LOC/GS can be connected to HSI. S Tec a/p gets it info from the HSI. (We are working closely with S Tec to get the 60-2 to hold altitude and

heading) Hope to have that operational in another month -3-

or so. We have a 4 place intercom, PS engr. ACK Elt uses grocery store Copper top D Cells good for 5 yrs. Flight Life of Doylestown, Pa SS brakes and SECOND WIND backup vac. sys. (takes alternate vac from throttle body automatically in case of pump failure. Precise flt speed brakes are working OK now, after modification etc. We put marine sump blowers on the vent and heat systems for use on the ground, they are great. We ducted heat to a back seat outlet and on to the pilot's feet with a smaller tube for glare shield defogging, defog works fine in a couple minutes with all windows steamed up.

We have a 24V sys with two 25A batteries in series. We tapped 12V off one of them for a radio shack stereo radio, tape, CD etc. Vision Micro system complete except cyl's and fuel quan. Electronics Int'l 6 EGT with one CHT and OAT in one unit. Tanis elec 110v preheater to the pan, block, all cylinders and an extra pad on the tail housing, used with a timer for 3-5hrs prior to start depending on OAT. Pilot seats are operated electrically for vert positioning.

WE use a 10v meter, rectangular shape and relabeled to show position of stab, flaps etc. We have a simple 3 way switch for flaps using the old style

transmissions. Therefore you must return the sw to neutral after using or it will pop the c/b as mentioned on the first flt. We have pickle sw's on the control wheels for stab trim using relays in the auto pos. We have a simple 3 way sw to alternately operate trim in MANUAL. One nice bright L/L on the nose gear does great on landing. There are different wattages available. We have our own design recog. lites in the leading end of the wing, great for seeing the ice form on the lenses at night. We use the Whalen 3 bulb fixture on the wing tip, after shaving 3 inches off the tip for a flat area to mount the lamp assy. WX 900 is installed, but has lots of interference which we have not cured yet. Nose gear doors retract with gear down. Pull cable for Main gear uplock release works great with pulleys in the wheelwell and under pilot feet.

Presently we have returned the Vision M DPU to Lance Turk as the F/F quit and we are having him lower the warning on the Fuel Press (cruise F/P when leaned is down around 8-9PSI on the IO-550G. He also has a new magnetic pickup on a mag for the tach, eliminating the tach drive shaft and old Ford transducer. S-Tec is going to replace our pitch servo that will now run at - the orig servo speed. The roll servo is going to have one that is faster. Our VOR has never worked and we just installed a new ant. in the tail area. We hope to have these and several other minor repairs done in time for Jim's trip to FL for

Builders News

Thanksgiving.

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Our Empty wt is about 2650 after being adjusted for the new elec fans 2 in the compt and another smaller 10" on the oil cooler. We had a severe overheating (oil temp) problem on the ground, haven't operated in warm wx with it since the fans installed, but it appears to be much better. CHT was never a problem on the ground or in the air, oil temp was OK in the air before, so we have high hopes, ask us at Sun 'N Fun how it is then. (Jim swears the IAS jumps 10-15kts when we turn all these fans on in Flt-he backs the throttle out 2"MAP to maintain the same IAS. I don't buy this, do you??)

This kit would still be sitting in the barn were it not for the great help we received from Alan, Dale, Pat, Gary, Doug, Dennis, Tim, Bill F. and everyone else at Cirrus who produced a great kit airplane and then proceeded to lead us along the path to one great flying Cirrus. We are looking fwd to meeting all you builders in this newsletter and let us hear your story now.

Keep the blue side up,

Cy and Jim Mehling

Cy and Jim Mehling



Rick Mills

By Rick Mills.....N95RM

My first encounter with the Cirrus was Oshkosh 1987. I was working on a Prescott Pusher at the time. Prescott went out of business spring of 1988, I bought the Cirrus fall of 1989. I received my fuselage early in 1990. I have completed most of the major fiberglass work on the fuselage, 90% complete with 90% to go. My wing arrived May of 1991. I have been working on the flaps and actuation system for about the last eight months. I started work on the wing tips and leading edge. I hope to have the wing completed by March or April 94. I am working on my Cirrus at the airport (Wadsworth Ohio, 3G3). My hanger is on the end of a condo hanger building, so I actually have 1.5 times the normal space. My engine will be a Fred Geschwender Ford Aluminum block V8. The plan is non turbo 350HP. The reduction drive will be 1.71 to 1 poly chain belt drive. I have designed an elastomeric coupler for the upper drive pulley to dampen torsional resonance. My theory is to keep the engine simple and reliable.

Instrument Panel:

So far my instrument panel includes,

KMA 24 Audio Control Panel
KY 97 A Comm.
Narco Nav 124 HSI
GPS ?????
KT 76 A transponder

Engine Instruments:

I'm considering the Rocky Mountain engine monitor system.

I enjoy working on the kit but it is taking longer than originally anticipated. Having Tom Logan and Al Corey close by has been a big help. My revised completion date is Sept. 95.

Rick Mills

Builders News



Bruce Lindsey

By Bruce Lindsey.....

Dear Rick,

I was glad to hear that you are undertaking a Cirrus Builder's News letter. I wish you luck and hope that this letter may help other builders.

I first flew the Cirrus Proto I in 1990 at Camarillo Airport and purchased a fuselage kit in 1991. I received my kit in March of 1992 and began construction in September 1992. I have frozen the design at this point and barring any major new products, my Cirrus will consist of the following:

Engine

600 cu. in. displacement
Aluminum Block, water cooled.
Dual Electronic, inter-cooled.
Dual Electronic Fuel Injection.
The engine will produce 600 H.P., but will be flat rated to produce maximum fuselage-limited horsepower and torque.
The dual fuel controls are computer interfaced with the dual crank-triggered ignition systems which are capable of

reading the air / fuel mixture of each cylinder, every revolution. The computer will then enrich or lean that cylinder the next revolution, thus every cylinder is getting a tune-up every revolution!. The ignition also fires the spark plugs on the exhaust stroke insuring that the plugs do not foul due to exhaust gases. This should produce maximum plug life.

All moving parts will be coated with aerospace materials to produce maximum thermal efficiency with minimum friction. The stainless steel / inconel exhaust system will be coated inside and out to remove as much heat as possible from the engine compartment. Oil system consists of a dry-sump vacuum system incorporating an oil-cooler / sump tank.

Cooling system consists of dual (13 inch by 3 inch opening, 40 inches long) N.A.C.A. scoops mounted in the bottom of the fuselage. Cooling is a combination of electric fans / cowl flaps and exhaust augmentors.

Chain Drive

Universal Engineering

Propeller:

76: 5 blade MT composite

Avionics:

- 2 KX 155 Nav. / coms
- 1 KMA 24 Audio Panel.
- 1 KEA 130 Encoding Alt.
- 1 KT 70 Mode S Transpdr.
- 1 KR 87 Digital ADF
- 2 KI 214 VOR/LOC's
- 1 FMS 5000 ARNAV GPS
- 1 WX-10A Stormscope

2 MFD 5000 ARNAV
Multifunction Display
Cockpit/Engine Management
System.

- 2 KR 22 Marker Beacons
- 2 ST-180 S-TEC HSI's
- 2 ST-361 S-TEC Ft. Dir.'s
- 1 KRA 10A Radar Alt.
- 1 KI 229 RMI
- 1 KDI 573 DME
- 1 ATS-9000 Ryan T.C.A.D.
- 1 S-TEC 65 Autopilot w/alt. hold, vert. speed control and automatic electric trim.

Modifications:

Nose access doors are hinged with internal locking mechanism. Access is controlled by proximity switches which allow a smooth, fastener free surface. Access to cockpit is controlled thru a key board security system, located in the right nose access panel.

Nose gear and Main gear doors are made of carbon fiber/s-glass matrix.

Nose gear doors are mounted on spherical bearings instead of bushings.

Horizontal supports incorporate bearings instead of bushings allowing less friction.

Fuselage is re-inforced from tail to forward firewall with uni-direction glass laid a 45 deg. to centerline each direction.

Developing a possible Anti-ice system for wings, horizontal, and vertical tail surfaces.

Developing a possible Anti-ice system for windshield.

Builders News

Panel Design

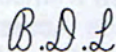
Developing an engine compartment Fire Overheat / Fire detection system.

Installing automatic cabin climate control system.

I hope this will be of help to you and I will send you a plan of my panel when I finalize the layout.

I have found a good source of electrical supplies to be Newark Electronics. They have a huge catalog, good prices, and excellent service. They may be reached at (312) 784-5100 and are located in Chicago.

Sincerely,



Bruce D. Lindsey



Tom Logan Completes Wing

By Tom Logan..... N95TL

well,.... nearly so.

Current status on the main wing assembly includes the installation of all shear webs, electrical wiring, flap tracks and actuator mechanism, flap motor, Precise Flight spoilers (manual deployment), aileron push-pull cables and lower skins with twelve access panels and the gear door cutouts. The preponderance of the wing surfaces have been prepared for priming. The few items still remaining to accomplish are the installation of the gear uplock mechanisms and the fuel quantity probes after the wing is mated to the fuselage.

Significant effort (3 weeks) went into shaping the leading edge to conform to the wing templates. I used the West System of light weight epoxy filler, products #105, #205 and #407, to get the buildup required. The thickest buildup was about 3/16" on the outboard section of the right wing. The leading edge shaping was accomplished with the wing in a leading-edge-up position.

This was possible by fabrication two wing stands (designed by Rick Mills) that slip over the main gear trunions. Placing casters on the legs of the stands allows us to move the wing around easily. This also makes for an excellent wing storage rack while awaiting the mating of the wing to the fuselage. We are enclosing a drawing of the stands in case they might be helpful to you. (see page 17 for drawing) Other wing parts completed are the tips with strobe light mounts, new type ailerons, main flaps and cruise flaps. Significant work is still required on the leading edge of the main flaps as construction left me with a leading edge that comes to a point, instead of being rounded.

My guess is that actual construction and finish time for the completed wing assembly will be 900 to 1000 man-hours.

Tom Logan

Builders Survey

Name (please print) _____ N _____

Address _____

City _____ State _____ Zip _____

Telephone () _____ Work () _____

Do you want your name, address and phone number given to other builders _____?

Best time to call _____ Builder serial No. _____ Date you received your kit. _____

Have you received your, Fuselage Kit _____ Wing Kit _____

Progress to Date

% Completed

(Fuselage) Horizontal & Elevator _____ Vertical & Rudder _____

Nose bulkhead _____ Floor & ribs _____ Fire wall _____ Bulkheads _____

Control System _____ Hydraulic System _____ Nose Gear _____

Window Installation _____ Heating and Ventilation _____ Tail housing _____

Fire proofing _____ Electrical system _____

% Completed

(Wing) Flap track _____ Flaps and cruise flaps _____ Flap actuation system _____

Hydraulics _____ Brakes _____ Landing gear _____

Leading edge _____ Lights _____ Wing closing _____ Alierons _____

Wing tips _____ Wing Installation _____

Builders Survey

Name _____ Address _____ City, State, Zip _____ Phone _____ Engine _____ Completion _____

Engine

What engine are you using? (make and model). Continental _____ Lycoming _____

Turbo Prop _____ V8 _____

Other _____

Avionics

Name	Address	City, State, Zip	Phone	Engine	Completion
Bob Long	1001 N.W. Cassin Dr.	Fort Worth, TX 76103	817-342-5500	Continental	Completed
Roger Garter	10528 Kistler	Fort Worth, TX 76133	817-342-5500	Continental	Completed
Don Bruce	10000	Fort Worth, TX 76133	817-342-5500	Continental	Completed
Don Lewis	10000	Fort Worth, TX 76133	817-342-5500	Continental	Completed
Urs Vilger	10000	Fort Worth, TX 76133	817-342-5500	Continental	Completed
Rick Mills	10000	Fort Worth, TX 76133	817-342-5500	Continental	Completed
Lillard Christ	P.O. Box 148	Fort Worth, TX 76103	817-342-5500	Continental	Completed
Bruce Lindsey	335 N. Martin	Fort Worth, TX 76103	817-342-5500	Continental	Completed
Jeff Dodder	1112 Hamilton Ln.	Fort Worth, TX 76103	817-342-5500	Continental	Completed
Fruit Labovitz	1128 Fulton	Fort Worth, TX 76103	817-342-5500	Continental	Completed
Ben Scallan	Albion	Fort Worth, TX 76103	817-342-5500	Continental	Completed
Dave Doucette	457 Rolling Trailer Trail	Fort Worth, TX 76103	817-342-5500	Continental	Completed

Suppliers & Components

Vendor Directory (Some sources suggested by builders)

Parts Source (by Tom Logan)

Part: Avionics Master Switch

Avionics master relay is disengaged when the battery master switch is in the off position. When master battery switch is thrown to on, master avionics push button switch lights up indication master avionics relay is still off. Depressing the lighted switch engages the master avionics relay and extinguishes the switch light. A malfunction in the avionics relay lights the switch.

Source: Tiger Aviation Products Ph. 602-726-4715 or Fax 602 344-5129
2095 East 32nd St.
Yuma, AZ 85365
Attention: Mr. Jim Asch

Part: Radio Switch for Shared-Nav-Indicator




Required for IFR flight when two nav radios are connected to a single nav indicator. An example is the situation wherein both Nav #1 and Nav #2 are hooked up to one HSI. Switch helps prevent pilot from attempting to fly Nav radio #1 information when Nav radio #2 is actually connected to the indicator. Includes lighted PB switch and remote relay. You have to add the press-to-test switch and light.

Source: Northern Airbourne Technology Ph. 604-763-2232
Kelowna, BC, Canada

Engine Instruments Indicators

1. Vision Micro Systems 5501 East Road Bellingham WA. 98226

Association Members

Name	Address	City, State, Zip	Phone	Engine	Completion Date
Al Corey	4669 Spring St.	Hadley, Mich 48440	313 797-4573	Cont. IO550	May 94
Tom Logan	92767 Youngstown Salem Rd	Canfield, Ohio 44406	216 337-0150	Cont. IO550	May 95
Cy Mehling	RD5 Ridgeview Dr.	Doylestown, Pa.18901	215 348-8134	Cont. IO550	
Glen Elliot		Albuquerque, NM. 87106		Cont. IO550	
Craig Baldwin		McHenry, Ill. 60050		Cont. TSIO550	
Bob Long	1501 N.W. Cassen Dr.	Oklahoma City, OK 73106	405 235-6065	TIO540 Lyc.	
Roger Carter		Anchorage, Alaska 99501		Lyc.	
Don Brosie		Aptos, CA 95003		Allison	
Don Lewis	7739 El Pensadar	Dallas Tx. 75248	214 661-1946	Allison	
Urs Villiger	Riedhalde 3	6337 Hunenberg, SWITZ	(41)42365443	Allison	
Rick Mills	3098 E. Normandy Pk D1	Medina, Ohio 44256	216 723-4615	V8	May95
Lillard Christ	P.O. Box 146	Port Aransas, TX 78373	512 749-5072	V8	
Bruce Lindsay	935 N. Martin	Rialto, CA 92376	909 874-6860	V8	Mar.95
Jeff Dodridge	1312 Hamilton Ln.	Escondido, CA 92025	614 480-2330	V8	
Frank Leinbach	2129 Putnam	Forest Hill, MD. 21050	410 893-988 410 391-7534	V8	Jun 95
Ben Smithers		Austin, TX 78703		V8	
Dave Doucette	457 Rolling Timber Trail	Kettering, OH. 45429	513 299-6292		

Association Members

Name	Address	City, State, Zip	Phone	Engine	Completion Date
Mike Barrett		Big Fork, MT.5991			
Jim Blair		Lorain, Ohio 44053			
Steve D'Incognito		Mundlein, IL. 60060			
Sandy Di Fazio		Holtsville, NY. 11742			
Robert Last		Fairfax Station, VA. 22039			
Dennis Lyons		Paso Robles, CA. 93446			
Ramon Pabalan		Bradenton, FL. 34210			
Tom Westonberger	4623 N 124 St.	Butler, WI. 53007	414 691-3733		
Tom Hastings	8344 Oso Ave.	Winnetka, CA. 91306	818 709-6006		

Alaska	1	MD.	1	OK.	1	WI.	1
CA.	5	MT.	1	PA.	1	Switzerland	1
FL.	1	NM.	1	TX.	3		
IL.	2	NY.	1	VA.	1		
MI.	1	OH.	4				

Cirrus Builders Association

News Letter Published by:

Rick Mills
3098 East Normandy Park
Apt. D1
Medina, Ohio 44256

Tom Logan
9276 Youngstown Salem Road
Canfield, Ohio
44406

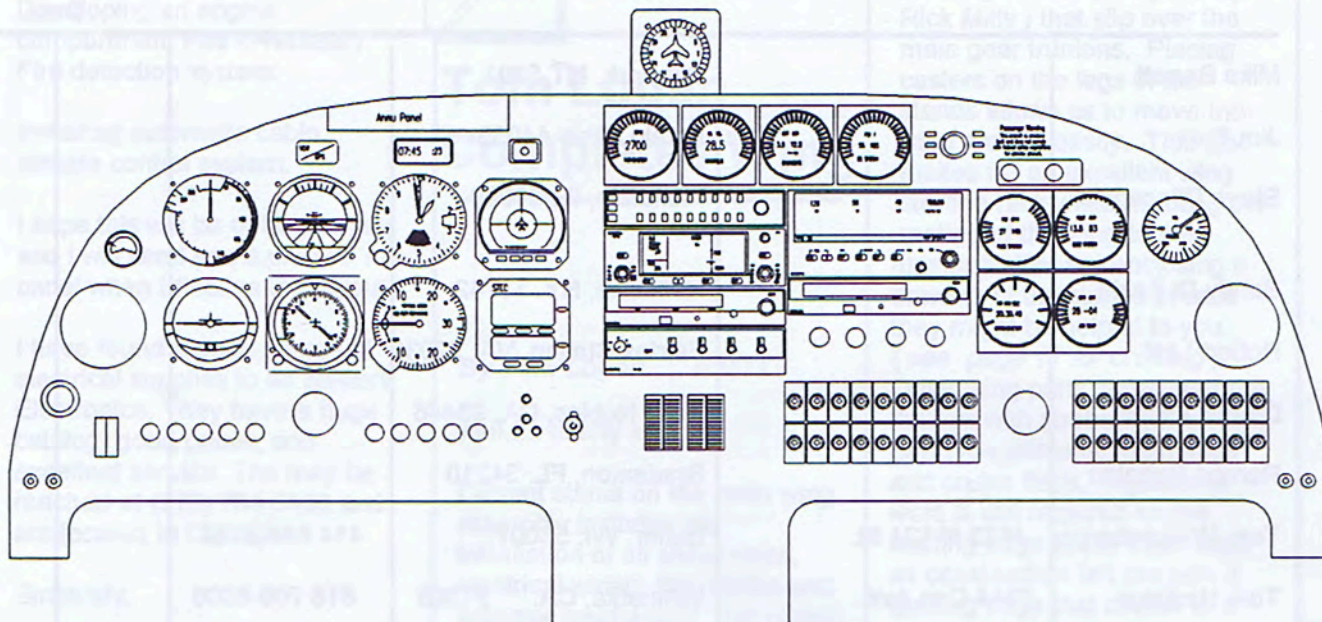
Cirrus newsletter is composed on:

Gateway 486DX2 - 66 (IBM compatible).
Microsoft Publisher 2.0
AutoCad 12
Microsoft Word 6.0
HP Laser Jet II.
(Jan. 94- HP Scan Jet IICX Color Scanner)

Please submit files:

3 1/2 or 5 1/4 disc ,(ASCII text format).
Please include a type written hard copy of your article
If a computer / word processor is not available, please
submit your article typed or clearly printed.

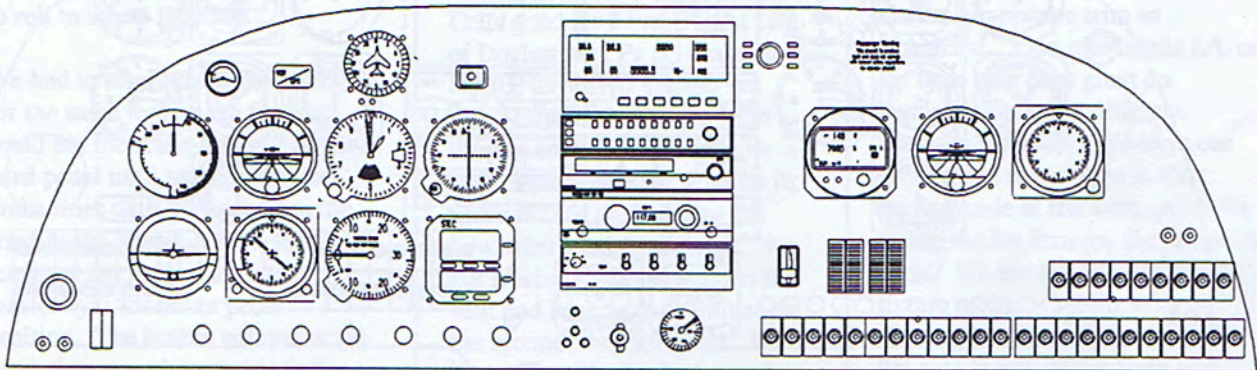
Instrument Panel Design



Tom Logan Instrument Panel as of 12 / 7 / 93

<u>-vac- VOR/GPS sw</u>		<u>Clock</u>	<u>avl sw</u>	<u>compass</u>			
				<u>Vision Micro System RPM IN. HG. CHT OIL</u>			
<u>Airspeed - Horz -</u>	<u>Alt - Strike</u>			<u>KMA 24 Audio</u>	<u>KNS80</u>	<u>Fuel Volt</u>	<u>Hyd Ga.</u>
<u>Turn - HSI -</u>	<u>Vsi - Auto/pilot</u>			<u>KLN 90 GPS</u>	<u>KY 197 Comm</u>	<u>Hrs. OAT</u>	
				<u>KY 197 Comm</u>			<u>Vent</u>
				<u>KT 76 A</u>			
<u>Vent</u>	<u>Switches</u>	<u>Gear up</u>					
		<u>Flap sw</u>		<u>C/B</u>			
<u>Master sw</u>							

Instrument Panel Design



Rick Mills Instrument Panel as of 12 / 7 / 93

-vac- VOR/GPS sw - compass avi sw

Airspeed - Horz - Alt - Vor

Turn - HSI - Vsi - Auto/pilot

Switches

Master sw

Rocky Mountain
KMA 24 Audio
KY 97 A COMM
Narco NAV 124 HSI
KT 76 A

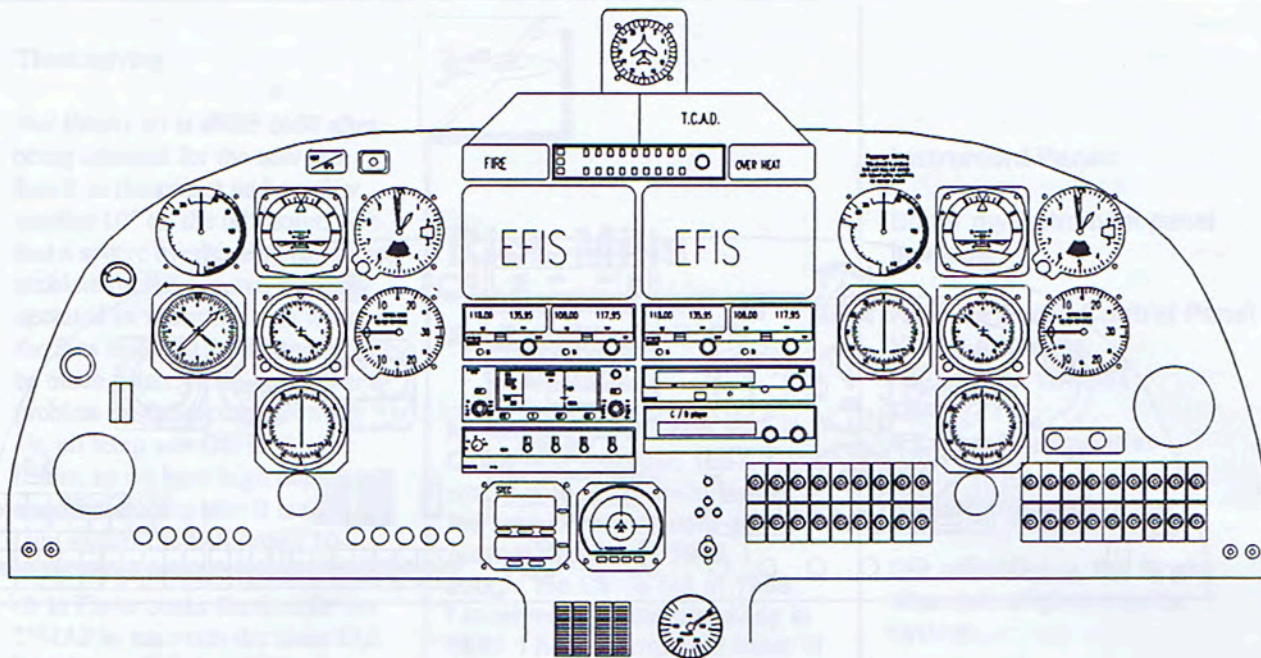
Gear up - Hyd. Ga

Rocky Mtn - Horz - DG
airspeed

Flap sw

C/B

Instrument Panel Design



Bruce Lindsey Instrument Panel as of 12 / 7 / 93

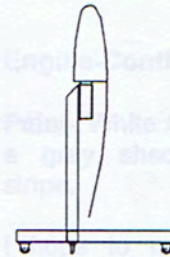
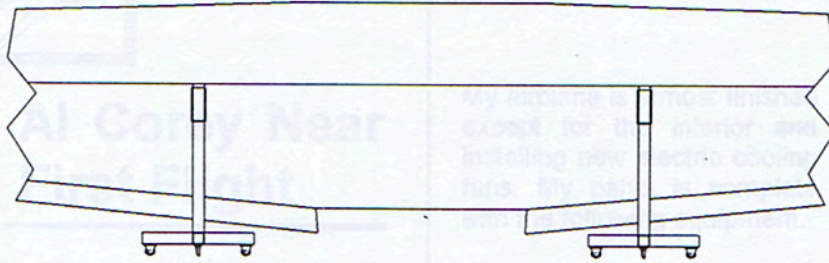
-vac- VOR/GPS sw	avl sw	Compass	
Airspeed - FLT-DIR. - Alt	RMI - HSI - Vsi	VOR Loc.	KMA 24 Audio EFIS KX155 GPS KT 70 Transpdr Stormscope Auto/pilot Flap sw Gear up - Hyd. Ga
			EFIS KX155 KR 87 ADF
			Airspeed Ft - Dir Alt. Vor HSI VSI Loc.

Switches

Master sw

C/B

Builders News



By Al Corey.....N7033Q

The first time I saw the Cirrus was in an FAA article of 1985. I took a trip to Design in (Baraboo WI) ride in Prole I was Klappeler (V230). I was the demo flight, took the factory and bought

I received my Horizon kit Nov 1989. The parts were not as good as they are now, but with a few calls I completed horizontal kit. The wing and fuselage were shipped Jan 1990.

I work as much as 30 hrs per week except during the summer, looking at the cycle time get in the way.

I had to rebuild the engine because the manual was given over to the manuals - how are such things

My plans are not much except for the interior area installing new electric cooling fans. My plans are not much

MA-24 Audio Panel

By 116 Com. Radio

Kit 100-1000 Gage

MLN-88 Control

KT76-A Transponder

FD 535-A 100

FD 525 Indicator

QM-92 0200

Kit Van (Northern Astoria)

Tools (Horizon)

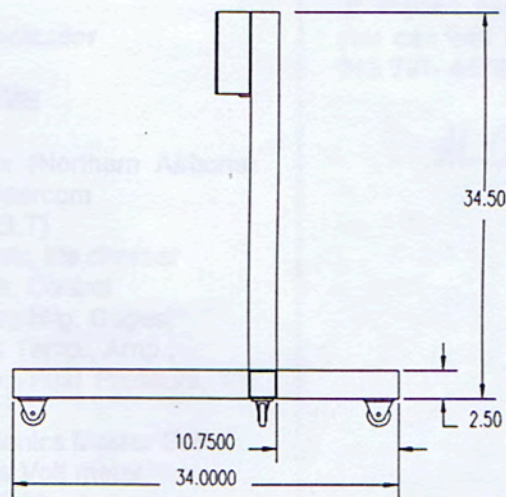
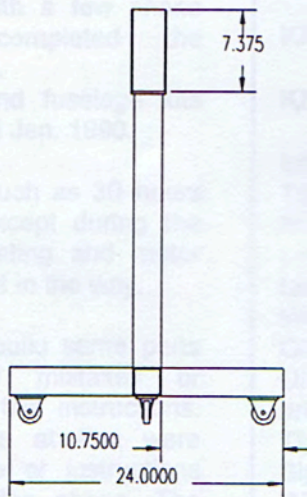
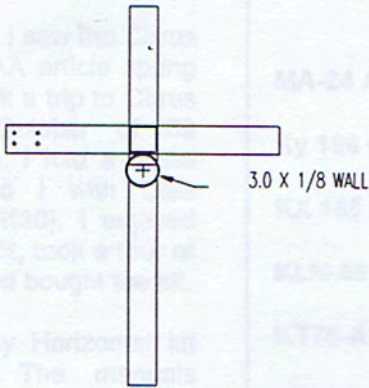
Plans (23.7)

Kit (23.7)

Kit (23.7)

Kit (23.7)

Kit (23.7)



Engine Continental R6 530-4
 Fabric White / Blue stripe with a grey shadow under the stripe.
 I will have to begin on the Cirrus from my shop to the hangar (Lapeer Depot, Lapeer, Michigan 49753) - April of 90 and first flight June 94. I have enjoyed building the Cirrus. It's been a lot of work.

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