

## Plane and Engine Data, Paper Manuals and CD's for Records and Information Cessna 120/140/140A

### Records, References, and Resources:

With the value of the planes ever-increasing, it is recommended that the owners invest a little more to have all the records of the planes and all the resources so as to view the parts of the plane and engine and how they are put together, knowledge especially valuable when parts must be replaced. More and more, the A&X's who work on the planes don't have the documents listed here.

This article explains which records and manuals are available, how to get them, what the Cessna manuals cost and the what and whys of the CD's (Compact Discs).

1. The airplane owner record from the FAA. Free. Downloadable.
2. The Technical Certificate Data Sheets, often referred to as "Certs". Free. From the FAA. Downloadable.
3. Paper manuals, one for the plane noted as the Cessna 120/140 Parts manual and a like manual for the 140A. There are two which cover the engines as "Continental Engine Parts Manual" and "Continental Engine Overhaul manual". These cost money.
4. The "Plane Operation manuals". And these cost money.
5. Aircraft Records, a listing of the plane from the day it was born, with all owners and bills of sale in one file and the features of the plane when purchased as well as all the official changes via 337's through the years. These cost less than ten dollars as paper or \$6.25 as CD's from the FAA.
6. The McCurtain CD's

A CD from McCurtain which contains the scanned 120/140 parts manual file and the 140A parts manual and the 120/140 Operation manual. \$20

A CD from McCurtain with the two Continental manuals noted above, also scanned into .PDF files. \$20

### FAA web site, Free Downloads:

By going to the FAA site and filling in your plane number (leave off the N or NC prefix but include the letter suffix), you get to this record. No charge. We don't know if they are ever updated. We submitted the 337 for the engine change to the O-200 5 plus years ago. <http://162.58.35.241/acdatabase/defimg.asp> It proves that you are owner of record and that the numbers are correct. (Or that you are not the owner. A twin crashed into buildings in New England yesterday....sold two years ago but never re-registered. You can imagine the law suits, insurance rejections and finger pointing.)

N-number	:	<b>N72425</b>
Aircraft Serial Number	:	<b>9586</b>
Aircraft Manufacturer	:	<b>CESSNA</b>
Model	:	<b><u>120</u></b>
Engine Manufacturer	:	<b>CONT MOTOR</b>
Model	:	<b><u>C85 SERIES</u></b>
Aircraft Year	:	<b>1946</b>
Owner Name	:	<b>WRIGHT NEAL F</b>
Owner Address	:	<b>1542 S WOLFE RD SUNNYVALE, CA, 94087</b>
Registration Date	:	<b>16 Dec 1971</b>
Airworthiness Certificate Type:		<b>Standard</b>
Approved Operations	:	<b>Not Specified</b>

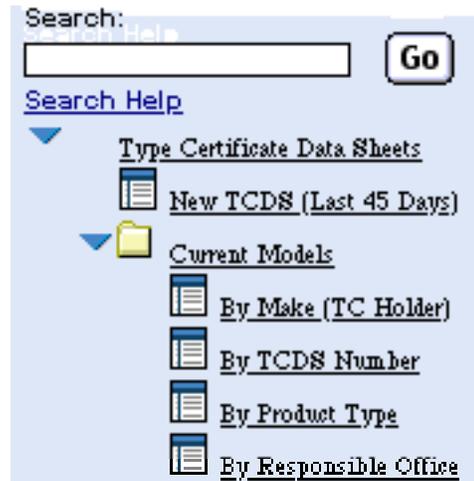
**Although you might not be computer-savvy, everybody today knows someone who can download and print the items listed here.**

**“Certs” or TCDS’s (Type Certificate Data Sheets) are good to have.**

[http://www.airweb.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgMakeModel.nsf/MainFrame?OpenFrameSet](http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/MainFrame?OpenFrameSet)

Plane model specific, available from the FAA, such as a cert for the Cessna 120/140 and another for the 140A (the A data is also useful for reference for the 120/140).. The certs list all the standard options as to engines, props, carburetors, skis, etc.. The certs are Free. There is a cert for the C-85 and one for the C-90/O-200 Continentals and others for the Lycoming engines and a cert for whatever prop you have Use the URL above and see the listing which is shown in the figure to the right.

Having these, you can determine which changes can be made to the plane or engine without the hassle of a field approval or, sometimes, a 337. The URL just below the title of this paragraph will get you to this page directly.



Select **“By Make”** and see this:



Choose C to find Cessna and see the next offering. Note the “Print View” hot link on the right above? Sometimes, the FAA download stalls and won’t let you go beyond the first page of the category, but if you invoke the “Print View”, it shows all and lets you scroll.

<b>▼ Cessna Aircraft Company, The</b>		
<a href="#">120</a>	<a href="#">A-768</a>	Rev. 34
<a href="#">140A</a>	<a href="#">5A2</a>	Rev. 21
<a href="#">140</a>	<a href="#">A-768</a>	Rev. 34

The 120/140 is a shared Cert and its revision is 34. The revision of the A cert is 21. If you go back to the menu where you selected “By Make” there is the option of the History By Make. Choose that, and C and you will see no history for the 120/140 Cert but there are two listed for the A. You can download and compare the version 21 of 2003 with the version 20 of 1995. I will save you time. The 2003 version adds the zip code to their address (honest) and page six adds the caveat about not using alcohol fuel.

**Manuals, Paper**

The “Paper” Cessna 120/140 parts manual is useful. This and the next manuals are available for purchase on the net, ebay, or from Spruce or Univair.

The paper parts manual for the C-85/90 and O-200 engines shows the assemblies and accessories and every bolt and nut. There is also an overhaul manual for the C and O-200 engines.

The International Org has a Reference manual for about \$45 and it is worth having because it contains so much “stuff” of value for maintaining the airplane and it gives you a place to store future articles pertinent to the plane, engine, and accessories.

### **CD's for Plane and Engines**

The McCurtain CD's <http://www.mccurtaintg.com/> (don't skip the tg for Technology Group)

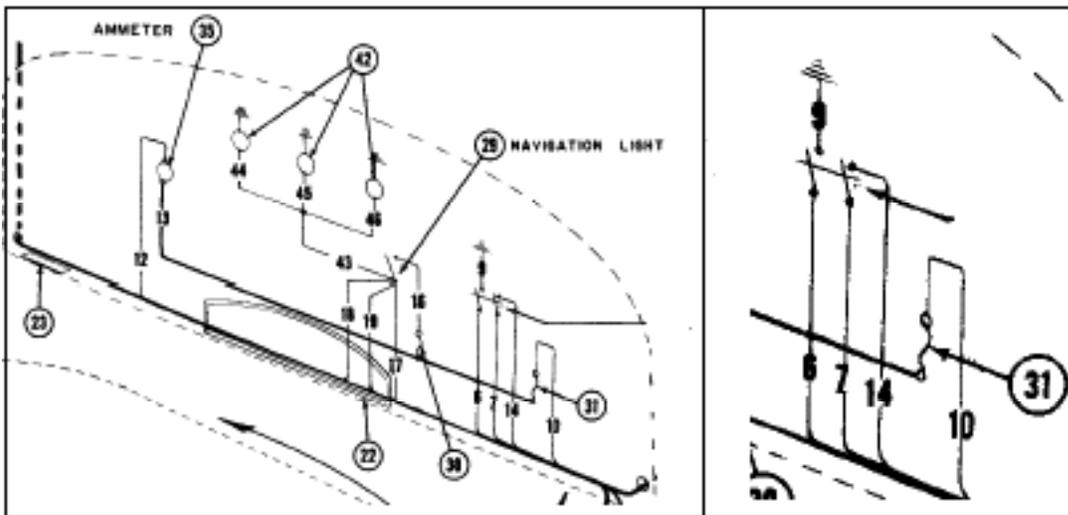
There are two McCurtain CD's we recommend. The CD for the 120/140/140A contains two files of the parts manuals for the 120/140 planes, one of which is a scanned copy of the paper parts manual just like the paper manual with the figures and text at 90 degrees to each other and another in which they turned all the pages “right side up”. The 120/140 Operating manual is there as well. The parts manual for the 140A is on the same CD; it is handy even for the 120/140 owners because some of its figures are so much better than in the 120/140 manual file. This CD costs \$20

The second CD is for the Continental C-75, C-85, C-90, and the O-200 engines. Two major files, one being the overhaul manual which includes many of the limits and the components of the engine and how to use them. It explains all the features of the engines and how the accessories work. The other file has the figures of all the components of the engine, including the accessories, down to the last nut, and great figures. This CD costs \$20.

### **CD advantages**

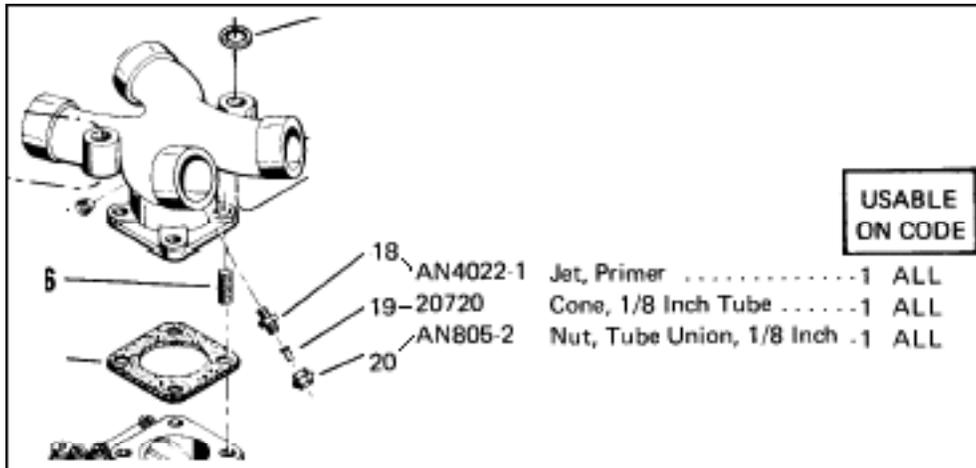
And the reasons you want both the paper manuals and the CD's? You can carry the paper manuals wherever you are or need them. The advantage to the CD's is due to the fact all the files are .PDF type. That means you can go to any figure and expand it as much as you want, up to 800 percent, and print that special feature.

Once you have the CD's, you can transfer the files to the computer, leave them there, and have them available without having to reload the CD each time.



On the left above is the 120 optional wiring at 100 percent which would look the same in the paper manual and on the right is a segment of it at 200 percent. Being able to expand the figures or parts of them makes it easier to understand the steps of assembly and the relationships.

Next, an example from the Continental Engine Parts CD is a figure and callouts for the later primer jet which improves the atomization of the fuel into the induction spider; the “ALL” means that the parts can be used on all the C engines and the O-200 and other parts codings indicate which parts cannot be used except for a particular model. A caveat. All the manuals have errors or left-outs.



**Costs:**

For the FAA registration record of the plane. Zero. Downloadable.

For the FAA TCDS's (Certs) for the engine and the plane and the prop. Zero. Downloadable.

A new 120/140 parts manual, paper, is \$20

The 120/140 owners manual is \$7

The sum for the 120/140 would be \$27. The McCurtain CD which has all that is \$20 (but both is better).

A new 140A parts manual, paper, is \$176. The horrible new cost of the 140A manual really gives you incentive to skip it until you find it on ebay or via the club. The A owners manual is \$10. The same McCurtain CD which has the 120/140 manuals includes the A parts manual and costs \$20.

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 The paper Continental engine overhaul manual is \$84  
 " " Continental " Parts " is \$62.

\$146 for them both

The McCurtain engine CD has both the Parts and Engine Overhaul manuals for \$20.

For \$40, you could have all of the noted manuals, except the 140A operating manual, on the two McCurtain CD's.

**FAA web site Plane Records/history:**

This is the official record of your plane, including the owners, bills of sale, and with the reported 337 changes. All those I have seen also have the original plane feature list. It used to be that you sent in for the microfiche but if is very hard to read and to get a paper copy, you had to find a reader and printer combo, almost impossible in '05. Today, according to the lady on the phone, microfiche copies are no longer available but paper copies or CD's are available.

To get the CD or a "paper" copy, 1-405-954-3116 (central time) or  
<http://162.58.35.241/e.gov/ND/AirRecordsND.asp>

Tell them your plane N number and serial number and address (or fill that in on the web site)

Expect to get the CD or the paper copy and the bill within a few days.

The bill will say: please send \$6.25 for the CD or a cost per the formula for the paper version depending on how many pages are in the record.

This next figure is the information page of the FAA's online resource to order the plane's CD or "paper" information, Read the bold last line....they send a bill with the CD or the "paper" and do not ask for a credit card when ordering: A query in Oct '05 confirmed that they only take the order for the plane but no pre-pay. On the internet site, they claim that they will send a bill and do not ask for or want a credit card at the time of the order.

<p><b>Request Records</b> You can mail or fax your request for aircraft records or Request Copies of Aircraft Records online.</p> <p><b>Format</b> You can order paper copies or electronic copies (on CD-ROM) of aircraft records. Each CD-ROM contains one aircraft record. You can view the CD-ROM files using Adobe Acrobat Reader. We will include a copy of the latest reader on the CD-ROM.</p> <p>Most records for aircraft removed from the U.S. Civil Aircraft Register before 1984 are in storage and only available in paper format. We can retrieve them on request.</p> <p><b>CD-ROM</b> \$6.25 per CD ROM (one aircraft record per CD)</p> <p>If required: \$3.00 to certify the record is true and complete (generally only required for court cases)</p> <p><b>Paper</b> \$2.00 search fee, charged for each aircraft record requested \$0.25 for photocopy of first page of records on paper \$0.05 for each successive paper page (an average paper record has 76 pages) \$2.00 if the record must be recalled from Federal Storage</p> <p>If required: \$3.00 to certify the record is true and complete (generally only required for court cases)</p> <p><b>We will send a billing letter with your aircraft records.</b></p>
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This URL takes you right to the page to enter the N number and the Serial number.

<http://162.58.35.241/e.gov/ND/AirRecordsND.asp>

And you see:

## Request for Copies of Aircraft Records Entry Screen

For more information about requesting copies and a schedule of fees [click here](#).

*My comments are italicized and underlined*

*If you click on the hot link "click here", you will see the costs as shown on the previous page.*

Do you want these records on?

CD  Paper

Do you need these records certified?

What is Certified?

Yes  No

Is this for a Government entity?

Yes  No

*You need to enter both N and Serial.*

N-Number:  Serial #

*Add aircraft to cart*

*Go to Checkout*

*Cancel all*

Add Aircraft to Cart

Go To Checkout

Cancel All

## Shopping Cart

*For reasons known only by someone who gets paid for making things difficult, the three bottom hot buttons are goobered until each is clicked on...and then they can be read....what they state I have repeated in red above them.*

Empty

*When you go to Checkout, the price will be part of the message.*

When you move to the "Go To Checkout", you will see the billing information as here:

For my plane, the "paper" cost would be proportional to the number of pages:

# of Pages	Cost
Registration - 110	\$8.40
Airworthiness - 54	
<hr/>	
Total Cost	\$8.40

And the CD cost, regardless of the number of pages, would be:

Model	# of Pages	Cost
120	Registration - 110	\$6.25
	Airworthiness - 54	
<hr/>		
Total Cost		\$6.25

There is no additional cost for postage (80 plus cents) whatever your order.

According to the FAA web site this morning, 12 Oct '05, when you order "paper" you get paper. You cannot order microfiche any more.

If you order by phone 1-405-954-3116, my "best way". You get the package and the bill within a few days. Very pleasant order takers.

Other notes.

I ordered my plane records on microfiche several years ago (the only offering) and found that locating a microfiche machine coupled to a printer is very difficult and the resource to me then has been discarded. It cost me between 20 and 30 dollars to make copies of the microfiche and was very slow, taking hours.

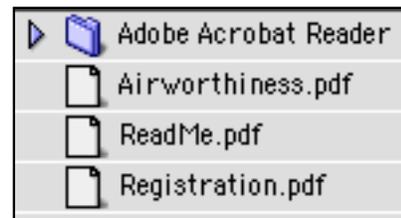
My recommendation? Even if you have the microfiche, get the information on the CD. With it, you can use the computer to print out a selected page, and reading the information from the CD is much easier.

### **CD contents:**

**Format:** Each CD ROM will contain **Adobe Acrobat Reader**, and depending on the specific aircraft record, it may contain an **Airworthiness file**, a **Registration file**, a **Suspense file**, or any combination of the three files.

The **Airworthiness** file contains airworthiness information, such as airworthiness applications, airworthiness certificates, major repair and alteration forms, etc.

The **Registration** file contains registration and recordation information, such as bills of sale, aircraft registration applications, security agreements, releases, etc.



"Airworthiness" starts with the equipment list at the factory, and the W&B at that time as well. Annuals, operational limitations, 337's for prop changes and radios and re-doing the wing coverings and changing to a new Scott 3200 tailwheel are there.

### **Blank pages:**

You will see blank pages and wonder why they included them. They have no choice but to copy both sides of every submittal and many of the back sides will be blank (actually, you will be confused until you realize that the text on some blank pages is actually the front side printing).

### **Records:**

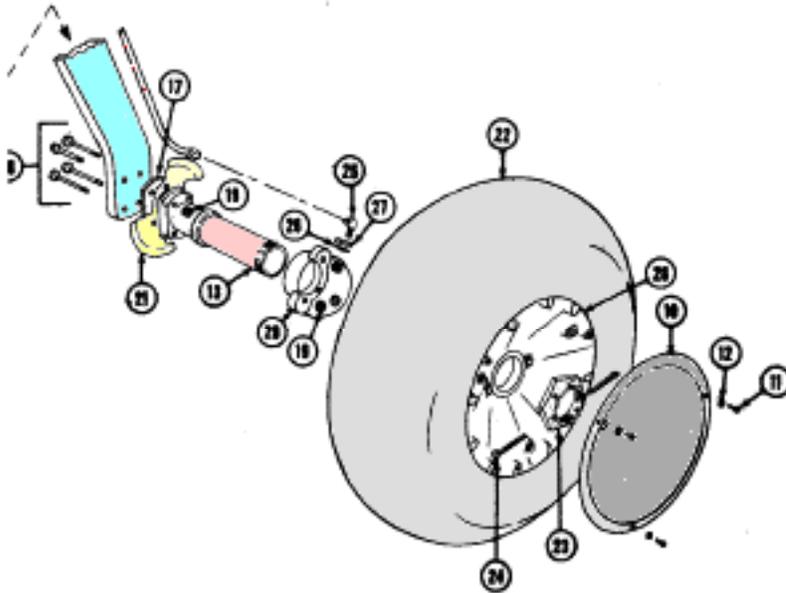
Having either version of these records could be of extreme importance for those with missing log books.

### **A caveat.**

Every manual has errors or left-outs or lists the newer part number but fails to mention the older part number. Use them but don't bet big money on whether they are right. For example, for the Continental parts manual, the figure showing the carburetor shows the Stromberg, but the only callout for a carb is for the Marvel. Cessna is the same in that they neglect to call out the original 3-way fuel selector but do show and call out the four-way selector. Catalogs for years stated that the big brakes on the first planes were on serial numbers zero to 1200; no, they were used on the first 1200 made, starting at serial number 8001.

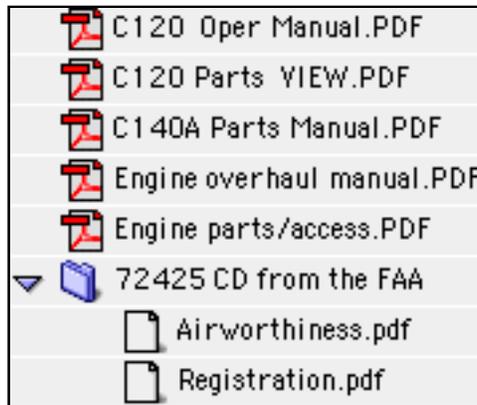
**Extras Possible with the CD's:**

The files on the CD;s are in the .PDF format which means you can bring up a figure on one and it looks exactly like a page in the paper manual because that was its genesis. The manuals were scanned page for page from the paper manuals except that they are all right side up whereas in the paper manuals the figures are rotated 90 degrees from those of text with the part numbers.



Copying a figure or section from the CD, one can take that file to a program which allows highlighting the features or pluck a part and expand that and accentuate it. To do the equivalent with just the paper manual, off to the Kinko's copy place, take the manual apart so as to get flat copies, make the copies, put the manual back together, and home to hand color or not and then send via the PO or scan. With the representation above, one can say to look at the yellow grass cutter.

**All in one folder on the computer hard drive, transferred from the CD's:**



If you spot an error or see something that should be added or changed, let me know for the next version.

Neal filed as CD's & manuals Nov '05

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