

There is a fairly well known issue with the Cambridge 302 in which it becomes "full" and then stops logging. It shouldn't happen per the company (should wrap around and overwrite previous logs) but it does appear to happen from time to time. The other symptom fixed by this procedure is when downloading log files and you get a "FAT" error message.

Below are articles about this issue gleaned from multiple resources.

John DeRosa

[john@derosaweb.com](mailto:john@derosaweb.com)

<http://aviation.derosaweb.com>

## From <http://groups.yahoo.com/group/GNII/>

Go to [http://www.craggyaero.com/winpilot\\_download1.htm](http://www.craggyaero.com/winpilot_download1.htm) and download the WinPilot tty program. Put this file on your IPAQ in the 'My Documents' folder (you can transfer it from your PC to the IPAQ SD card, put the SD card in the IPAQ, and then copy the file from the SD card to the IPAQ).

Once you have it on the IPAQ, connect it to the CAI via the normal cradle, and execute the WinPilot TTY program by navigating to it with file explorer on the IPAQ and clicking on it. It will start up and try to establish a serial connection to the CAI-302.

If successful, you will see a bunch of ascii characters scrolling up on your screen (this is the GPS data stream from the CAI 302). Open the virtual keyboard and hit the 'CTL' & 'C' keys. This will interrupt the GPS data and display a command prompt ('cmd>').

When you see the command prompt, type 'clear log' (without the quotes) and then hit the 'Enter' key (the Enter key is the one that looks like a bent arrow). Be very careful, as the 'backspace' key does not work in this procedure. If you make a mistake, you may have to turn the CAI off, exit the TTY program, and start over.

The CAI will then completely erase all the flights in the flight log, and this \*may\* (or may not) solve your problem.

G. Frank Paynter paynter.5@osu.edu  
GNII@yahoogleroups.com  
Wednesday, June 27, 2007 8:56 PM

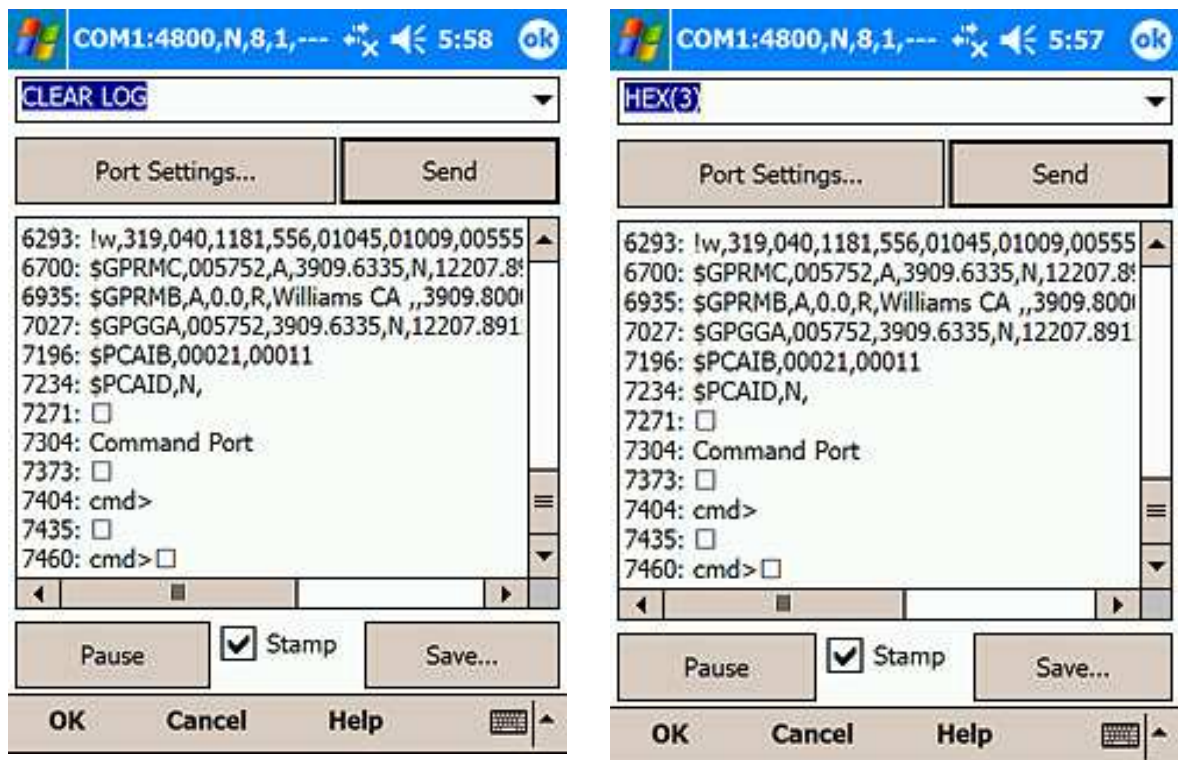
<http://www.cumulus-soaring.com/cai/files/Cambridge%20302%20Training.pdf>

## From

<http://www.darryl-ramm.com/2008/09/cambridge-302-vario-bug-clearing-log-memory-with-seeyou-mobile/>

Monday, September 15, 2008

### Cambridge 302 vario bug - clearing log memory with SeeYou Mobile



I like my Cambridge 302 electronic vario/logger, however there is a bug in the Cambridge 302 where flight logs are apparently OK but the security record is invalid. What I describe here is a way to use SeeYou Mobile running on a PDA connected to the 302 to clear the memory log to avoid recurrence of the problem.

If your 302 has this problem it does not matter if you download the flight trace using the Cambridge "300 Utility" software on a PDA or a Windows PC, or the

Datacam2 and Valicam2 MS-DOS utilities, or something like Naviter ConnectMe or SeeYou. All files downloaded will have invalid digital signatures. If you have this problem the Cambridge utilities will show a “Security Fail” error when the download completes.

The problem is apparently related to the flight log memory filling up and wrapping around, and overwriting previous traces, which it is supposed to do. However when this happens the calculated log signatures (IGC G-records) seem to be incorrect, even though the flight trace data itself is valid. This makes the IGC flight trace useless for FAI badge, record and Online Contest purposes. This may not affect all 302s or maybe not affect them each time the memory wraps, but if you do see this problem all your future flight traces will also be invalid. The workaround is to erase the flight log memory, at least then future flight traces will be valid, however of course this means you lose any current flight traces. I’ve had this happen to two different 302 variants and in both cases, clearing log memory made the problem go away.

As a preventative measure then it seems a good idea with a Cambridge 302 to periodically erase flight log memory before it has a chance to fill up. It may also be a good idea to run a lower log rate so the memory fills up less rapidly.

The only way to clear the memory is to attach a terminal emulator to the 302 serial port, type CTRL-C to put the port in command mode and at the cmd> prompt type CLEAR LOG.

I fly with Naviter SeeYou Mobile and the nice thing is it is possible to clear the 302 log memory using the simple terminal emulator built into SeeYou Mobile. So there is no need to run a separate terminal emulator program or connect a laptop with HyperTerminal etc.

To get started connect the PDA to the Cambridge 302 and make sure they are talking to each other (you get the “Cambridge 302 Connected” pop-up message on the main SeeYou Mobile screen). Then in SeeYou Mobile go to Settings>Hardware>Terminal. This Terminal screen is shown in the screenshots on this page. Click on the keyboard icon, this will let you type a string into

the top text field. Then click on the Send button to actually send this string to the Cambridge 302.

When you first bring up the Terminal screen the 302 will be spewing NEMA GPS data to the terminal window. The secret is knowing that if you type HEX(3) into this field SeeYou Mobile will interpret this as ASCII-3, aka CTRL-C and send that to the 302. Thanks to the folks at Naviter for pointing out this undocumented feature. After the CTRL-C is sent you will see the cmd> prompt in the terminal window. Then it's trivial to type CLEAR LOG and click on the Send button again. The Cambridge 302 will pause for ten seconds or so as it clears memory before returning another cmd> prompt. The next time you want to do this you'll find the HEX(3) and CLEAR LOG strings saved in the pulldown field at the top of the terminal page.

I do not believe this problem is related to problems with downloading flight traces from older Cambridge GPS model 20 or 25. I do not know if the Cambridge 302A (logger only model) is also affected by this problem, they may as the 302A is basically a stripped down 302.

BTW all the command port commands and relevant information are described in the Cambridge 302 Dataport User's Guide available [here](#).

And all this assumes there is not something else going on, if you are having other problems, check the digital seal on the 302 is intact. If you have a 303 navigation display connected you will see a message at power-up saying the seal is OK. You can also check the seal by pressing the control knob slowly ten times to go to screen 10 and then rotating the knob and you should see "gOOd SEAL" in the 303 display.

R-Track Technologies aka Cambridge Aero Instruments are currently testing different FLASH memory chips in the 302, I have had my 302 upgraded with this change but I'm not sure how long it will take to be comfortable that this has addressed the problem. The problem may also be a software bug, I'm not sure it is really fully understood.

## From <http://groups.google.com/group/rec.aviation.soaring>

How to clear CAI 302 flight log memory?

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[More options](#) Jun 15 2007, 7:42 pm

Some time ago, I was able to fix a friend's problem with a CAI 302 by clearing out the flight **log** memory. The procedure involved connecting to the CAI 302 with a comm program like hyperterm and typing in something like 'RESET' at the command prompt. I have gotten a couple of similar requests here at the Sports Class Nationals, but in the meantime I have forgotten the exact command or commands (getting old and senile).

Anyone have the procedure handy? If so, could you email it to me at paynter.5[remove this]@osu.edu?

TIA,

Frank (TA)

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[darryl.ramm@gmail.com](mailto:darryl.ramm@gmail.com) [View profile](#)

More options Jun 15 2007, 9:59 pm

On Jun 15, 5:42 pm, Frank <paynte...@osu.edu> wrote:

> Some time ago, I was able to fix a friend's problem with a CAI 302 by  
> clearing out the flight **log** memory. The procedure involved connecting  
> to the CAI 302 with a comm program like hyperterm and typing in  
> something like 'RESET' at the command prompt. I have gotten a couple  
> of similar requests here at the Sports Class Nationals, but in the  
> meantime I have forgotten the exact command or commands (getting old  
> and senile).

> Anyone have the procedure handy? If so, could you email it to me at  
> paynter.5[remove this]@osu.edu?

> TIA,

> Frank (TA)

You probably want **CLEAR LOG**. The Cambridge 302 Dataport user's guide at [http://www.cambridge-aero.com/manuals/dataport\\_300\\_sv517\\_rev21.pdf](http://www.cambridge-aero.com/manuals/dataport_300_sv517_rev21.pdf) contains what you need. But I'm not sure why this is needed. Make sure people are using the latest version or the Cambridge download software. A rev or two back they fixed a memory corruption problem in the download software that could corrupt memory (or at least make files look corrupted) and prevent downloads. It seemed to affect very few people, but I did hit it. The problem has not occurred for me on the last few recent versions of their PDA download software. Sorry I don't have affected version numbers handy, just use their latest stuff.

Darryl

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Cambridge 302 Flight Log Date Error?

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Paul  
[RemdeView profile](#)

[More options](#) Jul 17 2008, 9:29 pm

Hi,



I'm bringing this topic to this forum because it appears to be a unique and strange issue that doesn't make any sense to me. I'm a big fan of the Cambridge 302 and yet I can't explain this issue.

Below is the header from a flight **log** from a Cambridge 302 (or 302A). The customer is certain that he flew on Saturday, July 12th and yet the 302 flight **log** shows the date as July 8th. SeeYou therefore displays the date as July 8th. The filename (87C....) shows that the date was 8 (2008), 7 (July), C (the 12th) - which matches the date the customer says he flew the glider. Yet the date in the IGC file itself shows July 8th. He did not fly the glider on July 8th. This is very strange. The flight **log** passes security checks. The customer downloaded the flight several times with the same result. I am quite certain that the recorded date comes from the GPS, not the PDA that was used for the download.

I'm baffled. Have any of you ever seen this before? Do you have any suggestions? I don't think this flight was a badge or record, but it would be a shame to have the problem affect an important flight in the future.

Thanks,

Paul Remde  
Cumulus Soaring, Inc.

ACAM3AZ

HFDTE080708

HFFXA050

HFPLTPILOT:Dave Piotrowski

HFGTYGLIDERTYPE:DG808

HFGIDGLIDERID:808JC

HFDTM100GPSDATUM:

HFRFWFIRMWAREVERSION:F2.0

HFRHWHARDWAREVERSION:300 Series Version 2

HFFTYFRTYPE:CAMBRIDGE AERO INSTRUMENTS, 302+

HFGPS:GARMIN,LVS-25,12,18000

HFRSPRESSALTSensor:INTERSEMA, MS5534-AP, 20000

I033638FXA3941ENL4247REX

LCAMSBVER:5FWVER:F20001

C150302175427150302000103

C0000000N00000000WTAKEOFF

C2820939N08150150WStart B 28

C2910729N08213384WOcala 15

C2848250N08156510WFlyingBaron8

C2803511N08145473WWinterHavn23

C2824427N08150271WFINISH 26

C0000000N00000000WLANDING

B0210033709213N10745337WV019470000000000000128

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More options Jul 17 2008, 9:45 pm

I flew on July 13 producing a normal header  
ACAM3H9  
HFDTE130708  
HFFXA050  
HFPLTPILOT: John H. Cochrane  
HFGTYGLIDERTYPE:ASW-27B  
HFGIDGLIDERID:BB  
HFDTM100GPSDATUM:

However, on July 5, I got the dreaded "security fail" -- even though the security seal (screen 9) shows "good". Yes, rebooted everything, downloaded over and over again with the cambridge program, tried again next week -- all to no avail. The 13th downloads normally. If this is a related bug or others are experiencing the same thng I'd like to know, especially with nationals only 2 weeks away.

John Cochrane

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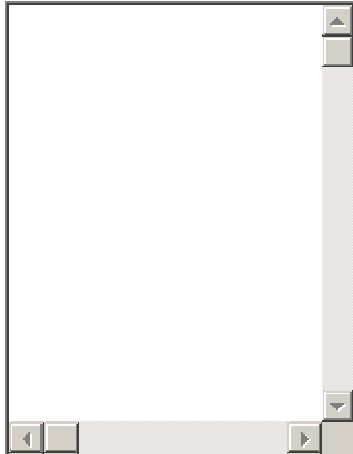
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Todd [View profile](#)

More options Jul 17 2008, 10:52 pm

Per the IGC GNSS specs

2.5.4. Date of flight - the date used in the file name and in the H-record (DTE code) is the UTC date of the first valid fix in the flight **log** transferred after flight. That is, the date applicable to the time in the first line in the B (fix) record, not the date at the time of switching on, or of take-off. This is particularly important for recorders operated in time zones where they are switched on close to midnight UTC. (AL6)

Therefore, one would conclude that there must be some fix from the 8th on the **log**. But, interestingly the "B" records (flight gps fix points) only have UTC Time in them.

So the question would be: Did you power up your 302 on the 8th?  
(maybe, just to do a new flight declaration)

Also, is there a big gap in the first few "B" record times? (i.e. a few points from the 8th followed by times from the 12th)

"B" record format (in part)

B H H M M S S D D M M M M M N D D D M M M M E V P P P P G G G G G C R

LF

Time UTC 6 bytes HHMMSS

Latitude 8 bytes DDMMmmN/S

Longitude 9 bytes DDDMMmmE/W

Or, for you conspiracy theorists: This is a result of some secret military test on the GPS system meant to test for gaps in the space time continuum ;-)

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Discussion subject changed to "Cambridge 302 Flight Log Date Error? - Memory Wrap Bug"  
by Paul Remde

Paul  
Remde [View profile](#)

[More options](#) Jul 17 2008, 11:53 pm

Hi John,

There is a strong theory that when a single flight **log** fails, the cause is a bug in the 302 when the memory gets full and wraps. I am trying to get Cambridge to fix it. I hope they will.

I'll be documenting the bug and the work-around in my next Cumulus Soaring, Inc. newsletter. Basically, as long as you **clear** the memory every now and then (once per season would be enough for most glider pilots) there is no way the bug can bite you. The procedure for clearing the 302's memory is documented here:

[http://www.cumulus-soaring.com/cai\\_downloads.htm#302\\_Training\\_Present...](http://www.cumulus-soaring.com/cai_downloads.htm#302_Training_Present...)

A friend here in MN recently had a flight **log** failure that cost him a state record. He had the logger set to **log** every second - which made the potential for the problem 4 times worse that it would be with a 4 second logging interval. I have since set the interval to 4 seconds and cleared the memory in his logger (with his permission of course). When the logging interval is set to 4 seconds the logger has enough memory for 100 hours.

Good Soaring,

Paul Remde  
Cumulus Soaring, Inc.

<http://www.cumulus-soaring.com>

"BB" <[john.cochr...@gsb.uchicago.edu](mailto:john.cochr...@gsb.uchicago.edu)> wrote in message

[news:921d18e8-c411-4b41-a0c0-ec020cc28698@l42g2000hsc.googlegroups.com...](mailto:news:921d18e8-c411-4b41-a0c0-ec020cc28698@l42g2000hsc.googlegroups.com...)

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[Uncle](#)  
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[More options](#) Jul 18 2008, 12:17 am

On Jul 17, 9:53 pm, "Paul Remde" <[p...@remde.us](mailto:p...@remde.us)> wrote:

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Whoa! Is this going to be one of those things I never hear about (well, I guess not in this case) until something bad happens to me? Then all I hear is "EVERYBODY knows that ....."

My 302A is set to 4 seconds, but I've flown it enough that it has overwritten the first couple months of 2007 flights. They still show up when you use the Cambridge utility to transfer files, but they fail the transfer. To date, I've never had a problem with a file.

Is there risk involved in clearing the memory using the utility Paul linked to? Call me paranoid, but I've even gone to the extreme of cutting the TX line from my iPAQ to the 302A to avoid any possibility of hosing up a flight record. (I had two files strangely segmented prior to cutting the line.)

TIA

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[waltw...@gmx.com](#) [View profile](#)

[More options](#) Jul 18 2008, 6:06 am

I purchased my 302 in 2002 and have had very little trouble with it. However since starting to post to the OLC I have had two files (71B and 81A) which would not verify. Gary Kammerer at Cambridge told me that somewhere in the firmware there is a bug that causes this problem periodically and they are unable to find it. He told me that he "believed" that Phil Schlosser was working on it. I tried to contact Phil since I have worked with him before on other problems but I got no reply. Then I read that he was working with Kellerman's group.

Gary told me that he does not think the problem has anything to do with memory wrap.

If you're attempting an important badge or record carry a backup for your 302.

On Jul 18, 12:53 am, "Paul Remde" <p...@remde.us> wrote:

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Paul  
Remde [View profile](#)

[More options](#) Jul 18 2008, 7:17 am

Hi,

Please see my notes below. \*\*\*

Thanks,

Paul Remde

"Uncle Fuzzy" <james.d.wynh...@saic.com> wrote in message

[news:749a30f6-8ff2-47e0-905a-d59b8b5e0128@z16g2000prn.googlegroups.com...](mailto:news:749a30f6-8ff2-47e0-905a-d59b8b5e0128@z16g2000prn.googlegroups.com...)

On Jul 17, 9:53 pm, "Paul Remde" <p...@remde.us> wrote:

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Whoa! Is this going to be one of those things I never hear about (well, I guess not in this case) until something bad happens to me? Then all I hear is "EVERYBODY knows that ....."

My 302A is set to 4 seconds, but I've flown it enough that it has overwritten the first couple months of 2007 flights. They still show up when you use the Cambridge utility to transfer files, but they fail the transfer. To date, I've never had a problem with a file.

Is there risk involved in clearing the memory using the utility Paul linked to? Call me paranoid, but I've even gone to the extreme of cutting the TX line from my iPAQ to the 302A to avoid any possibility of hosing up a flight record. (I had two files strangely segmented prior to cutting the line.)

TIA

\*\*\* I'm sorry to tell you this, but you must have missed when you cut the PDA transmit line because it would not be possible for the PDA to request the download from the 302A if the transmit line was not working.  
\*\*\* Theoretically, the bug should only affect the one file that bridges the gap when the memory wraps. In my friend's logger files before and after the bad flight **log** pass security checks fine.  
\*\*\* I highly recommend clearing the memory every spring.

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[More options](#) Jul 18 2008, 9:05 am

Thanks once again Paul!

Why am I so paranoid? The rules have changed this year,

6.7.4.4 ‡ Flight Recorder category requirements

....

6.7.4.4.3 ‡ To be valid, a flight **log** must pass applicable security checks

A6.7.4.4 ....For National contests the security checks must be valid. Logs produced by IGC sanctioned units with security seal failures are not accepted.

Of course, I get my first security fail two weeks before the Nationals.

Before, nobody worried about security seal errors. Now we have to. Replace those backup batteries!

John Cochrane

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**Uncle**  
**Fuzzy** [View profile](#)

[More options](#) Jul 18 2008, 9:25 am

On Jul 18, 5:17 am, "Paul Remde" <p...@remde.us> wrote:

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Nope. I don't use the iPAQ

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[Uncle](#)  
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[More options](#) Jul 18 2008, 9:30 am

On Jul 18, 5:17 am, "Paul Remde" <p...@remde.us> wrote:

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Hmm. Last post went out incomplete. I carry the iPAQ as a receiver only, to run XCSoar. I do all my downloading and configuring of the 302A with a standard serial cable and a laptop. I'll include the memory clearing in my January routine from now on! Thanks.

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[5Z](#)  
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[More options](#) Jul 18 2008, 10:05 am

On Jul 18, 8:05 am, BB <john.cochr...@gsb.uchicago.edu> wrote:  
> 6.7.4.4.3 ‡ To be valid, a flight **log** must pass applicable security  
> checks

> A6.7.4.4 ....For National contests the security checks must be valid.  
> Logs produced by IGC sanctioned units with  
> security seal failures are not accepted.

OK, but what if the previous and subsequent files are OK? I would think the contest committee could be convinced that there was no tampering, especially if this is a "known" problem. Let's not talk here about badges and records, just contests...

A couple years ago at a contest I also had a flight fail security. All prior and subsequent flights have been OK. CAI could not find anything wrong with the 302.

I fly with a 2 second logging interval, anything longer makes analysis and replay not nearly as much fun or useful. I have never cleared my 302 memory and I've flown well over 200 hours since that one and only incident.

-Tom

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[Andy](#) [View profile](#)

[More options](#) Jul 18 2008, 11:23 am

On Jul 18, 7:05 am, BB <john.cochr...@gsb.uchicago.edu> wrote:  
> Why am I so paranoid?

No you are not paranoid John, just justifiably concerned. I have twice had the security fail issue with my 302. The first time I sent it back to Cambridge, the second time I just waited for the problem to go away. I still don't understand it and I know it will bite me again.

So far the security issue hasn't cost me a flight but if I ever get back to Nationals flying I suppose it could. I did lose a Regional day though due to a utility date math error that prevent the **log** from being downloaded.

There is a lot to be said for dissimilar redundancy.

Andy

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[Andy](#) [View profile](#)

[More options](#) Jul 18 2008, 11:46 am

On Jul 18, 9:23 am, Andy <a.dur...@netzero.net> wrote:  
> The first time I sent it back to Cambridge, the second time I just waited for the problem to go away.

That probably wasn't very **clear**. My recollection is that the problem is only seen on some, perhaps one, **log**. Later logs will have good security even if no corrective action is taken. I have never erased my 302. I record at 2 second period and have recorded over 500 hours of flights. I think I have seen the security issue twice.

Andy

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Another Cambridge 302 logger bug

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[darryl.r...@gmail.com](mailto:darryl.r...@gmail.com) [View profile](#)

More options Jul 18 2005, 12:25 pm

Sorry if this is already well known, but it had me stumped for a week or so and I may have lost one flight **log**. I've looked around and I

believe this is different than noted in this newsgroup previously, since this occurs with the latest Cambridge **302** firmware (2.6.3).

Apparently there is a bug in all Cambridge **302** units (maybe also 302A units, I don't know) that can stop **log** file being downloaded once the logger memory gets full of flights, there is a workaround to **clear** all of the logger memory (losing any undownloaded flights). My frustration with Cambridge is that they admitted to having known about this problem "for quite a while" but apparently don't consider their customer's important enough to let everybody know about the workaround before this problem bites them. (boy you can tell I'm grumpy and have not had my caffeine this morning...)

I've been having problems downloading **log** files from my **302**. The iPAQ PDA running the latest Cambridge download utility reports "Cannot get FAT" (or was that "Cannot allocate FAT"?) in a dialogue box, when you dismiss the dialogue box the flight **log** list is blank. It's been possible to mess around resetting the PDA and power cycling the Cambridge in the past to get it to download **log** files, but the last two flights I cannot download at all. In my case Cambridge supplied a terminal emulator utility for the iPAQ so I could go into the **302** command line mode and do a "**clear log**" command.

Cambridge have a software guy working on this but no expectation of when they will have fix. You can reach Cambridge through the support form on their website [www.cambridge-aero.com](http://www.cambridge-aero.com) or telephone them, both Gary Kammerer in support and Arthur Chapman are well aware of this problem. I will credit Cambridge that they do respond fast when you contact them.

Darryl Ramm  
DG-303 Acro 6DX

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Marc  
Ramsey [View profile](#)

[More options](#) Jul 18 2005, 2:15 pm

darryl.r...@gmail.com wrote:

> Apparently there is a bug in all Cambridge **302** units (maybe also 302A  
> units, I don't know) that can stop **log** file being downloaded once the  
> logger memory gets full of flights, there is a workaround to **clear** all  
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> "for quite a while" but apparently don't consider their  
> customer's important enough to let everybody know about the  
> workaround before this problem bites them. (boy you can tell I'm grumpy  
> and have not had my caffeine this morning...)

It's apparently not that simple, as it hasn't happened to our **302** in the 3 or 4 years we've had it, despite the fact that we never issue a "**clear**

**log**" command. The memory fills, and the older flights simply disappear from the list as time goes on...

Marc

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[darryl.r...@gmail.com](mailto:darryl.r...@gmail.com) [View profile](#)

[More options](#) Jul 18 2005, 2:40 pm

Well damn, I wish I'd had that coffee before shooting my mouth off. I was not out to shoot Cambridge, but that is how the post reads. I love the Cambridge **302**, this is a really nice unit. I replaced another brand expensive European flight computer earlier this year with this unit and would do so again in a heartbeat. I really like the netto vario, simple operation of the logger, the great integration with WinPilot Pro, and this unit has been rock solid (Including in a unbelievably hot cockpit with ground temperatures well over 100F where both of my iPAQ PDAs wedged themselves and refuse to reset and the Cambridge **302** works just fine - and because of this I'm in the process of installing a 303 nav display to back up the PDA.).

Yes Marc you are correct, I talked more with Cambridge staff today and I need to correct my claim that this is a problem with all units. This problem may occur if you start to fill the memory in the **302**, apparently only some 302s. In my case I've flown around 6,000 km with my **302** since installing it earlier this year, that's a lot of hours and I'm running with the default 4 second sample rate, a lot of samples. Apparently if there is a problem the symptoms start with seeing intermittent "Cannot ... FAT" errors on the utility software when trying to connect to the **302** to download **log** files. Indeed I'd been seeing this for a few weeks intermittently and had always blamed my iPAQ PDA's. This problem can continue and become more frequent as it did in my case. Anyhow the workaround of clearing memory in the **302** is easy, and can be done when intermittent FAT errors occur (meaning you should be able to download any **log** files before clearing memory). And Cambridge is working on a permanent fix.

Darryl Ramm  
DG-303 Acro 6DX

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[More options](#) Jul 18 2005, 2:47 pm

Darryl,

2.63 is the latest firmware. FAT = File Allocation Table. I seem to remember this being discussed in the news group 2 or 3 years ago.

As I remember **302's** don't use FAT for file management, but Microsoft products do. I am guessing your iPAQ or storage card is out of memory.

**302's** have a ton of memory, enough to store a year or more worth of flights before it starts over writing old files. I have not lost a file yet, even after updating the firmware

Just guessing your iPAQ is out of memory or you need to put a new copy of the utility down on your iPAQ. I bet Paul Remde ( Cambridge Rep ) can help you solve your problem.

Sincerely,  
David Walsh

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[More options](#) Jul 18 2005, 3:03 pm

I received a FAT error this past Saturday and it took me three attempts to download my flight file. Guess I need to **clear** out the memory. Can this be done with the utility program?

Brian Iten  
MB1

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[More options](#) Jul 18 2005, 3:25 pm

David

Thanks for your suggestions. My understanding from talkign to Cambridge is what I'm describing is not related to space on the PDA. I have a two large PDAs (iPAQ hx4700) with almost 1GB free on the SD cards, most of the iPAQ flash store and most of RAM free and the problem occurs with both PDAs.

How much the **302** stores before wrapping depends on the sample rate and

how many hours you fly. In my case I'm very lucky to be flying enough that the Cambridge (or any other logger) won't store "a years worth of flights" before wrapping (and even if it does wrap the problem I am describing does not affect all 302s).

Thanks

Darryl Ramm

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[More options](#) Jul 18 2005, 3:43 pm

Hi Brian

Although as another poster pointed out there have been other causes of FAT errors in the past (lack of space on your PDA), however I suspect you saw the same intermittent failures I did, especially if they just cleared themselves up without you having to make more space on your PDA. So while I definitely do not speak for Cambridge support I'd suggest you do **clear** the **log** memory.

The workaround is to type the "**clear log**" command at the **302** command prompt, and to do this again if you suspect you are getting close to filling the **log** memory space - that should be a while. There is no way to do this from within the standard Cambridge utility software (a good idea given you don't want to do this accidentally). To do this you need a terminal emulator hooked up to the **302** serial port and literally type "**clear log**" at the "cmd>" prompt. Cambridge can supply you with a terminal emulation utility for an iPAQ/Windows Mobile PDA. I would expect other terminal emulators, including things like hyperterm on a Windows PC should work fine. If you have problems I'm sure Gary at Cambridge support can help or post back here.

Cheers

Darryl Ramm

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[More options](#) Jul 19 2005, 1:06 am

Hi Darryl

I agree, the C302 is a superbe instrument.

We have two C302 with 2.63 and one with 2.52 and not yet seen this problem. But thanks for the hint with the terminal programm. I have a demo program called zterm for the IPAQ. Very handy software - it sleeps for 15 seconds sometimes, because of the demo. One problem I see with **log** files is, that it takes a long time to download them to the IPAQ. We also have filser LX instruments and it takes much less time. Do you have the same experience?

Thanks FW.

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[More options](#) Jul 19 2005, 10:05 am

I'm pretty sure the Cambridge is running at 4800 baud. I think Filsner products default to 19.2k Baud. You are probably just seeing the Baud rate difference. I'm not sure what flow control the Cambridge uses when downloading files and I'm not sure if it is possible or safe to increase the baud rate. I know there is a command to set the baud rate on the **302** via the serial port but I'm not sure how to do it on the PDA end with the 3UTIQ... utility. I think some of the other **log** download tools have easy ways to set baud rates. You would also need to change the baud rate on whatever flight computer software you are using (Winpilot in my case). Personally I don't find it a problem and probably don't want to mess with it, I start the **log** download after landing and it finishes long before I am ready to pull my PDA out the cockpit.

Darryl