Version 2006.02.01

- 1. Complete rebuild of Block Builder using newer version of Borland C++ Programming Language.
- 2. Introduction of Pilot Bidding Window which allows the pilot schedulers to import and view the Pilot Bids from Jazz Bid. See manual supplement for Bid Window at <u>www.egeen.com/geencomputer</u>.

Version 2006.12.01

1. Changed CRM and CRW time for pilots 10:00 – 18:00

Version 2006.11.01a

1. Fixed bug where Employee Info Dialog would not display.

Version 2006.11.01

- 1. Disabled check box for credit Outside the Window in assignment dialog. Now use outside the window codes from toolbox
- 2. CRI credit for pilots now 5:18 from 5:00
- 3. CRW now 9:00 start for 8:00 duration
- 4. SIW now 9:00 start for 6:00 duration

Version 2006.10.01

- 1. Outside the window codes now check the exclude credit from block option by default.
- 2. Last names with a space in place of apostrophe now show full last name.
- 3. FA French qualifications now loaded from perc.ext file instead of separate text file.
- 4. Fixed bug where a non US pairing was flagged as US segment.
- 5. Program expiration date changed to Dec 31, 2007.

Version 2006.08.01

- Reserve Duty from previous month now included as duty for CARs 36/7 3/17
- 2. Added pilot toolbox codes SIW, GRW, CRW.
- 3. Fixed bug 3 or more 12 Hour duty days followed by DH now shows legal.

Version 2006.05.01c

- 1. Increased Max Number of Pairings to 1500 from 1000
- 2. Added ATJ code for FA Files
- 3. 400 series pairings now may be outside window
- 4. Pairings that finish at 00:00 now show 24:00.

Version 2006.05.01

- 1. Added more Transaction Codes for importing previous month schedule data. Will not appear in the toolbox.
- 2. Changed default Eqp code for RJ aircraft to 7 regardless of first pairing being 2000 or 7000 series.
- 3. TEA and HTL codes now 8:00 18:00

Version 2006.04.01b

1. Fixed Filter Window bug when running Windows 98 and Windows ME. **Version 2006.04.01a**

1. Recompile all source code and redistribution of setup file due problems. **Version 2006.04.01**

- 1. Overlap Data is now adjusted for Daylight Saving Time changes which occur during overlap.
- 2. 5UN code removed from Toolbox
- 3. Reserve days now are flagged as duty for CARs rule checking.
- 4. Overlap Pairings with 2 duty periods in one day now calculate correct credit for current month.

Version 2006.02.01

- 1. Font in Pairing Filter Window is now the same font the user has selected in Setup Preferences.
- 2. French FA pairings are now shown in a bold font. If there is more than one FA on a pairing then only one will be shown as French in the Pairing Window. All French FA pairings will be bold in the Blocking Window.
- 3. FAT for FA now 4:45 credit
- 4. CRM now defaults to start at 9:00 and end at 17:00.
- 5. All FA blocks including Leave Blocks now printed.

Version 2005.11.01a

- 1. All FA files default to 8 for Eqp Code. Can be overridden manually.
- 2. Refined Text search in Pairing filter to 100% accurate
- 3. Fixed bug in resetting block window override in employee info dialog.

Version 2005.11.01

- 1. Changed CRJ Pairings from 7000 and 5000 series to 7000 and 2000 series
- 2. Changed Program Expiration date to Dec 31, 2006

Version 2005.10.01

- 1. Changed Credit for Pilots VAU, VAC, MED, LOA, MOV to 2:50
- 2. Minor Changes to New File Wizard

Version 2005.07.01

- 1. Changed Credit for Pilots VAU, VAC, MED, LOA, MOV to 3:00
- 2. Minor Bug fixes.
- 3. Changed max number of pairings to 1000 from 600

Version 2005.06.01

- Changes for French Language Issues in FA files. LIS files can now be scanned to flag French pairings. A txt file generated by Jazz will allow French qualified FA's (2C or higher) to be flagged as such. Warning messages will be generated if non French FA is assigned to an FA pairing. Pairings flagged as French will have "FRENCH PAIRING" added to the pairing text. This will allow blockers to filter out French Pairings using the Pairings Filter.
- 2. When CRJ selected as new file type for pilots all 5000 and 7000 series pairings will be loaded.
- 3. Added dialog to explain Shortcut Keys in Help Menu.

- 4. Filter Window remembers last 20 Filter Text Commands. Select from drop down list.
- 5. Implemented ability to filter blocks in Block Building window. Allows hiding of Completed Blocks, Leave Blocks, Non Employee Blocks and Ability to Hide all Blocks except Check Pilots / Cat B qualified pilots while displaying Line Indoc and Cat B Blocks.
 - Right click on a vacant day in an employee block and select Block is Complete. Block will be hidden when filtering completed blocks.
 - For assigning Line Indoc flying from Non Employee Blocks to Check B and Check Pilots select this Check Box in the Filter dialog. Then enter up to 3 lines of text in the edit boxes. Such as YYZ in Edit one and CAT on Edit two. This will display all Pilots selected as Check B or LTC in the employee info Dialog and all blocks with a name containing YYZ or CAT.

Version 2005.05.01

- 1. Added FA Committee Codes: BRG, HTL, UNF.
- 2. Changed DFD days to show as Days Off. Min Days Off now reduced by one for each 2 DFD days.
- 3. Added debug support in the Preferences dialog. Do not use this option unless you are experiencing abnormal Program Termination with Block Builder. If you are select this option and a file called BBDebug.txt will be created to track program events. Very useful if problems occurs during new file creating.
- 4. Ability to adjust Min Days Off on a person by person basis in the Employee Info Dialog.
- 5. Enabled Scroll wheel support for Mice. Window below mouse arrow scrolls when scroll wheel moved.
- 6. Added extra information for pilot restrictions and qualifications in Pilot Info Dialog. Includes No USA , Check Pilot or Line Indoc qualifications. If NO USA is found in Pilots name when loading the extracts this will be selected automatically. The name will appear with a yellow bar around it to indicate no USA. A Check B will have a plus before the name and a LTC will have # before the name.
- 7. When pairings are loaded flight segments are checked for USA city pairs. If found then USA SEGMENT appears in the pairing text. This can be used to filter out USA pairings in the filter window using !USA.
- 8. If a USA pairing is awarded to a No USA pilot then there will be a warning. Not shown as illegal incase it is a deadhead to training.
- 9. Backup improved to allow multiple file backups with date and time included in file name. Recommended for use on larger capacity backup drives such as a USB flash drive or a Hard Drive. Each file is approximately 1 2 megabytes in size.

- 10. FA leave blocks excluded in print function.
- 11. All pairings with 2 captains now appear white in block window and have a white bar under them in the pairing window. The words TWO CAPTS ON Date(s) is added to the pairing text. This allows you to filter out most regular pairings using TWO CAPTS in the filter window. Note that all pairings with the same number will be displayed if one or more occurrences have 2 captains.
- 12. Curser changes to arrow while dragging a pairing between blocks. Fine tuned mouse pointer selection to improve accuracy of selection in blocking window.
- 13. File is backwards compatible. If any problems are encountered simply reinstall the last version of BB and open the file as normal.

Version 2005.03.01

- 1. Pilot DFD days now show as working day in Day Off count only. Min days off reduced by 1 for each 2 DFD days in block.
- 2. Added features to Pilot Info Dialog for future development.

Version 2005.01.01

- 1. STT now 4:00
- 2. ITR code now CARS duty

Version 2004.11.01

- 1. Added Code SEC for Pilots and FA's.
- 2. Added Code SEW for Pilots.

Version 2004.10.01b

1. Pilots Stats STT 4:30 Credit.

Version 2004.10.01a

- 1. Changed FA Reserve B to 12:00 02:00
- 2. Reserve B now only covers one day as duty ends at 2:00

Version 2004.10.01

- 1. Added COB code to Toolbox
- 2. Changed pilots Reserve B to 12:00 02:00

Version 2004.07.01

- 1. FA Reserve now 4:00 credit.
- 2. Pilot Training Days now 4:00 credit.
- 3. Added IDO code for Pilots.
- 4. Restored previous crew rest checking function for FA files to correct a legality issue.

Version 2004.03.01

- 1. Added requirement for rest after reserve duty, i.e. RB followed by GS not legal, RA followed by GS ok. Back to Back reserve is permitted.
- 2. Moving days not prorated.

Version 2004.01.01

1. CRM changed to 9:00 18:00 for Pilots and FA

2. On creating new pilots file RB in the past month now show Res duty on actual day and next day.

Version 2003.12.01b

- (Pilots) Removed requirement for 3 consecutive days off to change from 36/7 to 3/17. Now legal if either 36 consecutive hrs off in last 7 days or 3 consecutive days off in last 17 in last 17, Summarized as follows:
 - Start on day 1. If no duty from midnight on day one then proceed to day 2.
 - Look back for 36 consecutive hours off in last 7 calendar days. (not 168 hours)
 - If no 36 hour period found then look back for 3 consecutive days off in last 17 calendar days.
 - If both of these checks fail then there is a CARs 36/7 3/17 violation.

Version 2003.12.01

- 1. Fixed days off count when RSB occurs on last day of previous month
- 2. Fixed problem with some blue warning bars not appearing when less then 12 hrs crew rest. Warning message was displayed but blue bar did not appear.
- 3. Extended validity period to Dec 31 2004.

Version 2003.11.01a

1. Changed 2 days off at a time requirement for FA reserve blocks from Warning to Violation.

Version 2003.11.01

- 1. Changed print function for pilots. Blocks that are composed entirely of MED, UTF, LOA, MAT in any combination will not be printed. The roster numbers will also be adjusted accordingly.
- 2. Tweaked loading of PRG pairings to display layover cities correctly on pairings with one + day layovers.
- 3. Removed requirement to have crew rest between Reserve days and non-reserve days. This will be a crew scheduling function.
- 4. Changed 2 days off at a time requirement for FA reserve blocks from a violation to a warning.
- 5. Reserve B days of last day of previous month now count first day of new schedule as a working day for days off calculations.

Version 2003.10.01

- 1. GRS, CRM, SIM, IPT, CPT, TRN, CBT and TVS changed to be included in CARs rule checking.
- 2. Added requirement to have crew rest between Reserve days and non-reserve days.
- 3. Changed times for Stats and Vacation GO calculations start at 00:01 to avoid assignments running into Vac and Stat and GO days.

Version 2003.08.01

1. Fixed FA Reserve Code RE anomalies.

- 2. Changed CARS 36/7 or 3/17 to reflect new policy. BB defaults to a 7 calendar day window to check for 36 hrs off. If employee has worked the day being tested but is off duty prior to midnight a 168 Hr window is created from the Time off duty and 36 consecutive hours are looked for in that window instead of 7 calendar days. 3 consecutive days off are still required to switch schemes.
- 3. Employee Info Dialog now displays details on Warnings and Errors as well as the logic used to determine if a 36/7 or 3/17 violation is triggered.
- 4. Days required off logic revised to round up in all cases.
- 5. Exporting of UTF code now lumped together in one block.

Version 2003.07.01

- 1. Changed FA Reserve times. Removed RC code and replaced with RE. Now zero credit instead of 4:20.
- 2. Allow credits to be in or out of total block time. Default is set in tool button. Option may be changed by left clicking on assignment in block and checking or un-checking the Exclude Credit from Block check box.
- 3. <u>Press and hold ESC key</u> to see total credits in block. Hours turn yellow to indicate total credits displayed.

Version 2003.06.02a

1. Fixed problem where some CARS violations appeared in the last month or on the 1st day. 36in7 or 3/17 now looks back further into previous month for blocks of 3 days off.

Version 2003.06.02

- 1. Changed CARS interpretation for pilots. Now require 3 days off to switch schemes from 36 hours free in 7 days to 3 days off in 17. The method initially used is a best guess as I have no way of knowing precisely which scheme was in use in the previous month. You may get 36/7 or 3in17 errors in Last Month. There is nothing you can do to fix them. Here is the logic.
 - Starts on 17th of last month and advance one day at a time.
 - Default start with 36in7 rule.
 - Check back 7 days from any day with duty.
 - If an error occurs then look back for 3 consecutive days off and try the 3in17 rule from that point forward.
 - The scheme may be changed back and forth at any time as long as there is 3 consecutive days off.

Version 2003.06.01

- 1. Added CBT code to pilots.
- 2. VAU credits now show zero in printout.
- 3. Moving days calculated correctly for required days off.

Version 2003.05.01

1. VAU credit changed to 2:50 for pilots and FA's

- 2. Trips credits loads on last day of pairing containing credit.
- 3. Pilots DFC code not exported on day following RB or on last day of overlap.

Version 2003.04.01a

- 1. Un-Fine Tuned Days Off required for Reserve.
- 2. Name now appears in Red for any illegalities as well as the red line.

Version 2003.04.01

- 1. Added STA code for pilots and FA's
- 2. Fine tuned Days Off Required for Reserve.

Version 2003.02.01

- 1. Fixed autobackup feature. Backs up with bak extension every 10 mins if option is set in setup preferences
- 2. Toolbox adjustments
- 3. DC draft code added to export automatically. Credit needs to be entered in Crew Trac
- 4. Fixed export bug with date error on Vacation overlapping into next month.
- 5. Added password requirement to edit pairings. May view by leaving the password field empty. As pairings are loaded from PRG file there should be very little requirement to edit pairings.

Version 2003.01.01

- 1. Removed old Vacation Codes from toolbox.
- 2. Added ITR , 4HS, VAU code to pilot/fa toolbars as appropriate.
- 3. Fixed RB overlap data in pilot blocks to correctly show days off count.
- 4. Added Res A to B and B to A legality checking for pilots.

Version 2002.12.01

- 1. Fixed bug in exporting file to CrewTrac which caused some overlap assignments to disappear.
- 2. Changed functionality of right clicking to remove assignments. Now need to hold SHIFT key while right clicking. Control key still used to remove pairings. This will eliminate the risk of accidentally removing an assignment as the CTRL key may be held down while removing pairings.

Version 2002.11.01a

1. Fixed bug in Fatigue units and Consecutive days of work code that caused some warnings not to be displayed.

Version 2002.11.01

- 1. Changed CPT code to reflect 4 hours of duty. Now 8:00 to 12:00
- 2. Added TVU code. Travel Unpaid.
- 3. Changed Fatigue units and Consecutive days of work warnings to reflect pairings that finish before 2am counting as a day off.

Version 2002.10.01a

- 1. Fixed issue with left clicking and CTRL key not locking pairings in Block
- 2. Now use SHIFT and left click to force in a pairing where it may not normally be allowed.

Version 2002.10.01

- 1. Changed CARS rule checking to reflect letter from Transport Canada. Now, do not look back from a day off for checking 36/7 3 in 17. Also 80 hrs may be substituted for 3 consecutive days off in the last 17.
- 2. Non flight duty removed from CARS rule checking. ie GS,SIM ect.
- 3. Ability to load following month's absences. This will allow blocker to see upcoming Vac, Stat ect. This data may be loaded at new file creation or from the File -> Import menu. Red line indicates end of current month. You cannot manually edit this data
- 4. More rule checking prior to assigning a pairing around absences. <u>You may</u> <u>force a pairing into a line by holding down the ctrl key while left clicking.</u>
- 5. When a pay protection event occurred in the previous month, only some of last months data would be loaded from the previous months extract.

Version 2002.05.01

- 1. added CIR to toolbox. Company use only
- 2. RSB and RSC that finish after midnight now changed back to true end time. Modifications made at export time to finish at 23:59.
- 3. Fixed bug in FA overlap data. 12 hrs rest now required instead of 13

Version 2002.04.01c

1. added STT code to FA toolbox.

Version 2002.04.01b

1. changed RES B to start at 15:00 due to contract change

Version 2002.04.01a

1. reserve counters b-c paint bug fixed

Version 2002.04.01

- 1. Minor bug fixes
- 2. Reserve A-B-C counters at bottom of screen
- 3. Minor enhancements

Version 2002.03.01

- 1. New Version Block Builder 2
- 2. New file format. Old File viewer installed with the new installation.

- 3. Roster, Overlap data and absences are now loaded from CrewTrac Extracts instead of the last Block Builder file. This is more accurate and saves time.
- 4. Revised for merger into ACR.
- 5. One version for both pilots and F/A.
- 6. Improved toolbox.
- 7. Right click on assignments to remove. Left click for info. Same as Pairings.
- 8. Warning when removing assignments and pairings. Can be avoided using Ctrl key
- 9. Drag and Drop pairings between blocks.

Version 2001.07.01

* New File format for improved CARS error checking in Carry Over transition

* ZX Pilot Reserve changed for max 5 days with 2 off before and after

Version 2001.05.01

- * AirBC Toolbox
- * Changed HTML printout re: cduties and assignments that overlap the next day
- * Changed to expire Dec 31 2002
- * Days off updated for toolbox assignments that overlap next day

Version 2000.10.05

* AirBC FA Toolbox updated

* Printing Routine Changed

Version 2000.06.10a

* Fine Tuned Save for Internet Feature

* Implemented Save for Public Consumption saves SKD file for use with Block

Builder File Viewer. Avail at http://geen.hypermart.net

* Fixed Air Ont Export to crewtrac

Version 2000.06.10

* Modify toolbox for Air BC

Version 2000.03.01

New Features

* Undo up to 200 pairing transactions. Use F1 Key to Undo

* Right Click on a Pairing in the Pairing Window to see who

is legal and who bid it using saved filters. Ideal for fitting in pairings near the end of block construction.

Bugs Fixed.

* Printing Blocks shows Now when Employees Name longer than 10 Chars.

* Daylight Saving Time bug fixed to properly check for crewrest on pairing that overlap DST change dates.

Version 99.12.13

Updated Toolbox for AirBC Fixed Bug in RSB that showed 0 credits for Air BC FA

Version 99.11

Disabled RSV button from Toolbox Allowed more than 24 hrs in draft credit box Included updated files in build for Y2K issues Added 4 more buttons to ZX FA version More changes for export to CrewTrac Extended validity to Dec 31 2000

Version 99.08

Fixed Glitch Loading Pairings with 24:00 checkin time from PRG File Fixed Problem with CARS Violation not showing up under rare circumstances

Block Builder Version 99.06 Valid Time frame Adjusted

99.02

This version improves the load from PRG files by showing all deadheads including other carriers.

RSV button has been disabled. You must use A or B.

Obscure problem with PRG load fixed where a 4 day pairing showed 4 layover points.

99.00/98.12

Fixed problem with loading a pilot into the roster from edit roster. Extended expiry date to Dec 31 1999

Block Builder Version 98.10

Minor Change for toolbox. RA and RB changed to RSA RSB and CCT to CRM for FA version

Program now expires June 31 1998.

Pairing assignment History can be displayed under view History. Still under construction for undo/redo feature.

Block Builder Version 98.09a

98.09a update to fix painting problem with days off. It was not updating while block building under 98.09.

Changes in this Version of Block Builder 98.09

Block Builder version 98.09 includes the following improvements:

Variable Space grid. Setup Preferences now allows for selection of the font of your choice and for the spacing of the block building grid. The default font is Arial 8pt. You can choose to display the last 3 digits of the pairing number or all 4. Also you may display 2 or 3 points on each layover. i.e. YLW or LW. If you want to display all of this information you will have to increase the horizontal spacing to fit it in. The painting routines have been updated for the pairing window. Pairings are displayed in their appropriate color with a horizontal bar bellow the pairing which gives you an idea of the check in and checkout times.

Change to the file format to support Export to Bornemann CrewTrac. Before making a new file for next month open your last blk files and save them. This will save the carryover information in the new format. Then when you create a new file. Load the carryover from the newly saved file. We intend to test importing the finished schedules into crewtrac this fall. Please ensure that all employee numbers are full and correct after you finish building the schedules. You may change the employee number by clicking on the employee name and editing it. Also, all codes used must be standard for your airline. Pairings may now be loaded from either a LIS file or a PRG file. The prg file is more accurate so if you have problems loading from the LIS file then ask for a PRG file from the company.

I hope you enjoy the new features. I am still working on more improvements. Please send me an email to kgeen@cablelan.net and cc to kgeen@compuserve.com with any bugs or improvements you would like to see.

Thanks Kevin

Tip 1. Did you know that you can press the Tab key to toggle the pairing window between show all and show only open pairings.

Tip 2. You can lock in a pairing to a block by holding the CTRL key while left clicking the pairing number. A black bar will appear under the pairing to indicate that it is locked in.