

## Using MIDIBook as an Analytic Tool in Arranging\*

Wally Venable

**M**IDIBoek is a free program for Windows computers which was developed for use in printing templates for organ rolls and books. I first used it for printing roll patterns for my John Smith 20-note organ, and I described those experiences in the April 2008 issue of the COAA magazine, *Carousel Organ*, in an article titled “Hand Punching My Own Rolls from Midiboek Templates.”

MIDIBoek does the “drafting” work of laying out a template of a roll, book, or strip, as well as a lot of file checking. It uses an organ scale in the form of a “Gamma File,” a text file of the scale description saved with a .GAM extension. MIDIBoek prints only those notes which lie within the instrument scale, and lists those notes which do not fit. It also allows for transpositions when printing a template.

As I have become more involved in arranging music for crank organs, both as rolls for my John Smith Senior 20 and as 20-note MIDI files for the OSI Strasse Organ, I have come to appreciate that MIDIBoek is a powerful tool for analyzing MIDI files during the arranging process.

MIDIBoek is not a MIDI editor. **Figure 1** It can not make any changes in a MIDI file. To make changes, you also need a program such as my favorite PowerTracks or the well known Cakewalk program. There are also some free, but less powerful, editors such as Noteur, Aria Maestosa, and Anvil Studio which can be found through an internet search.

When you open a MIDI file in MIDIBoek you can immediately play it through your computer's MIDI output by clicking the “Play” symbol above the file name. If you are using the internal sound cards, all notes in the file will play, whether they are in the selected organ scale or not.

When you use the “Translate” button, the program offers both a preview of the book or roll which would be printed, and also a detailed listing of errors via the “Report” button.

There are two ways in which a template may be viewed: with notes displayed as “slots,” as it should be punched for a key operated organ or a John Smith busker, or as spaced holes as would be better when punching for a roll operated pneumatic organ like a Raffin. For use in arranging, the “slot,” or “piano roll” view is more useful, regardless of the type of roll or file which will be used for the final production.

**Figure 2** shows the “Preview” window for a very simply arranged tune, the *Valse des cheveau de bois*, as set up for the 20-er Smith buster. (The MIDI file is also correct for

all other Carl Frei 20er scale organs.) This view tells us a good deal about the file which would be useful if we had imported it from some outside source. In particular: (1) It is a waltz, using a single bass note (at top) followed by two accompaniment chords (in middle), and an unornamented melody (at bottom). (2) The beats of the

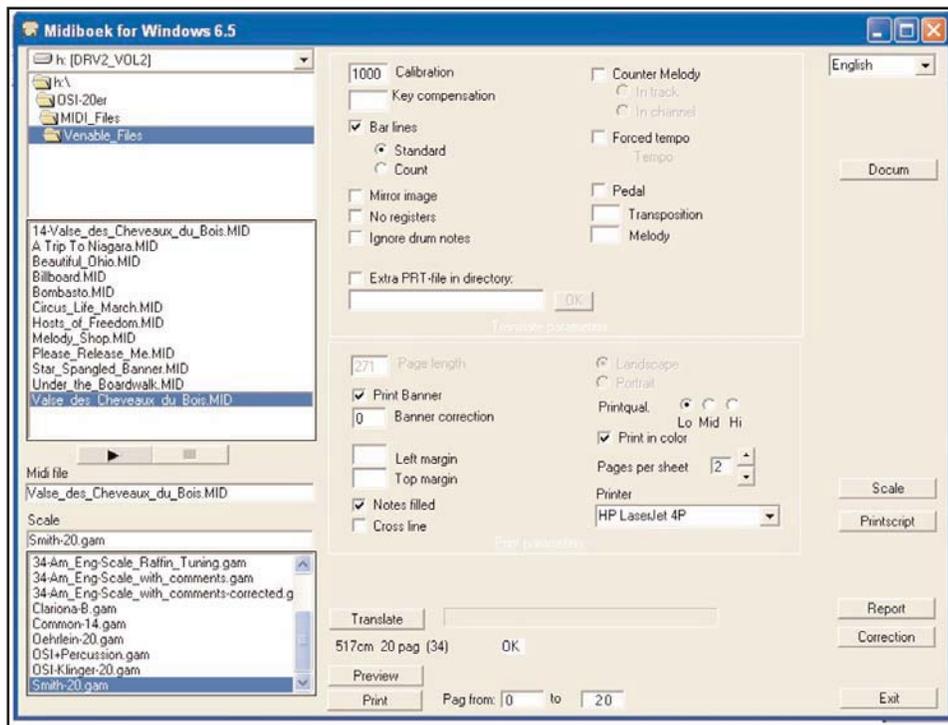


Figure 1. The main MIDIBoek screen.

music fit the time structure of the MIDI file correctly.

MIDIBoek is particularly useful in searching out a key transposition which will help fit an existing MIDI file to a particular organ scale.

The *Valse des cheveau de bois* shown above checks out as “OK” when we use the gamma files for the Smith/Raffin 20-er format, but if we look at the same file in the Common-14 scale used on some old “organettes,” we get a report of 379 notes as being “in error,” or “non-playing” on the organettes. **Figure 3** shows a portion of the “Report” of the errors which the program provides. If we enter a value of 2

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as a “Transposition” value, we get a reduction to 221 errors, or with +4 we get 112 errors. Searching further, and using -3 we can reduce the errors to 86. If we transpose from the key of F to D using our editor, and then shift the notes in error up or down an octave, we can produce a pleasant version of the tune with no errors.

As you gain skill, looking at the notes in the error list will quickly suggest how hard or easy it will be to obtain a decent arrangement through transposition to a particular key.

MIDIBook allows the user to select the display color for each note in the gamma file. This is useful in letting you look at the various voices within a file. **Figure 4** shows a portion of a file in a new MIDI scale which I have developed for an extended version of the OSI Strasse Organ.

In the July 2011 issue of the *Carousel Organ* Jim Partrick described a new plug-in MIDI interface for the small OSI Strasse Organs. The new MIDI interface provides a potential expansion of the scale from 20 to 32 notes, but no way to play the additional notes on the organ. We can add solenoid driven sounds produced by an external unit in a relatively straight forward manner. In Figure 4, the 20 notes of the original Carl Frei scale played by the organ as built are at the top. Below them are three percussion “drum” notes. Below them are the notes for a 9-tone glockenspiel.

By looking closely at Figure 4 you can see that the rhythm of the notes and percussion does not fit evenly to the bar lines of the MIDI file, and that, in fact, the notes are somewhat raggedly spaced. This is evidence that the original file was probably generated by someone playing a keyboard by hand and recorded by a MIDI device, rather than created in a MIDI editor.

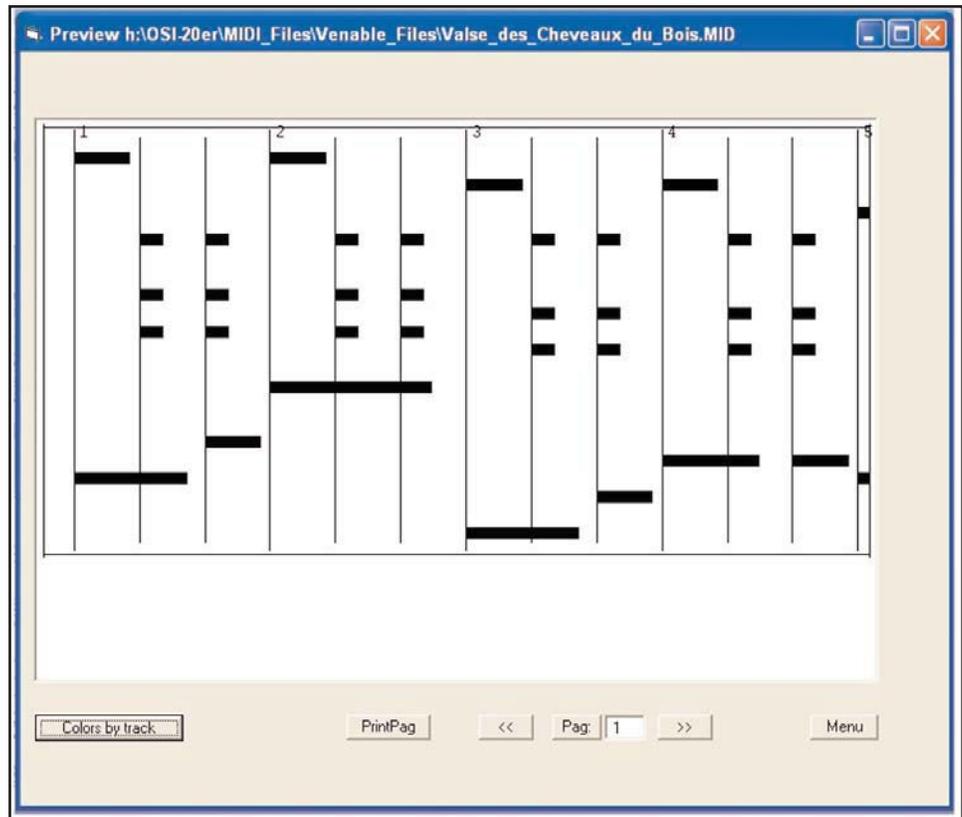


Figure 2. The preview screen for a simple tune, as arranged for the John Smith busker organ.

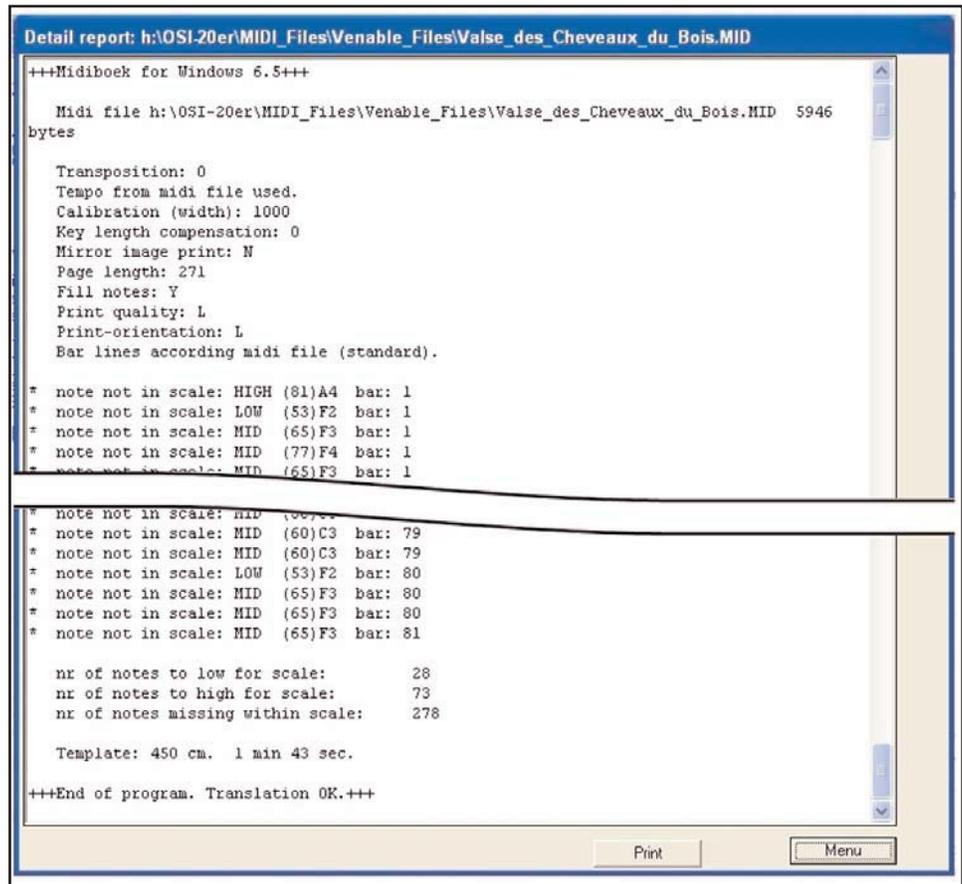


Figure 3. A portion of the error “Report” for the 20 note version of *Valse des cheveau de bois* as it would be punched for a 14-note organette.

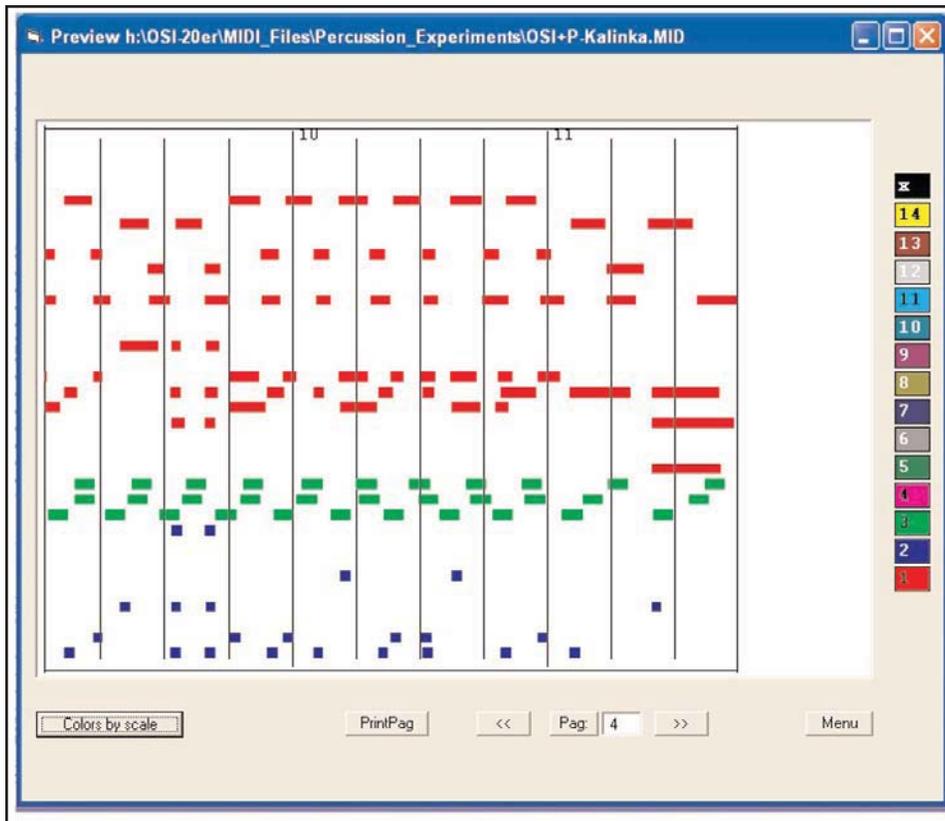


Figure 4. A portion of a tune for an OSI 20 note Strasse Organ with three additional “drum” notes and a nine-tone glockenspiel. Each voice is in a different color. This “roll” is simply an analytical tool since the organ will play directly from a 32-note MIDI driver board.

MIDIBoek allows viewing much more complex book structures. There are a number of gamma files for traditional European book organs provided at the distribution site which can help the novice arranger learn more about large organ scales.

In this brief note I have only summarized a few of the features to be found in MIDIBoek. If you are experimenting with arranging, you can download the MIDIBoek for Windows software and the editor, Noteur, from <http://huizen.daxis.nl/~Ppaardekam> and give them an audition. The authors distribute the programs for free!

Wally Venable focuses his mechanical music interests on 20-note crank organs.

## COAA Rally with ***Soulé Steam Fest and Rail Fest*** *Meridian, Mississippi*

November 4-5, 2011 Venture into the old “Old South” and join us as we partner with the Soulé Steam Festival and Rail Fest in Meridian, Mississippi for the last rally of the season. This will be the first COAA event in Mississippi and the southernmost location for a rally. We will be pairing up with two festivals for a perfect combination of steam engines, rail fans, and mechanical music. Step back in time when travel by train was preferred, the steam engine was king, and mechanical music was all the rage.

We have quite a lineup of evening activities planned for you this time. The Temple Theater, a 1927 movie palace, is our host for dinner on Friday. Owner Roger Smith will provide a tour with demonstrations of some of his private collection of mechanical instruments on display in the lobby, followed by dinner in the ballroom. The stage of the Temple Theater was the 2nd largest in the country after the Roxy in New York in 1927!

The rally is on Friday & Saturday but you will want to arrive by Thursday evening for some special pre-rally activities. Meridian is the home of a historic Dentzel carousel and is housed in the only remaining building built from Dentzel blueprints. Both are fully restored. Thursday evening we are invited for a box lunch and to ride this jewel that was built for the 1904 St. Louis World’s Fair. Bring your small organs to play inside the carousel building. We plan on having the local TV station available to provide publicity. After the carousel we will move to The Temple Theater for a concert on the original Morton Organ performed by Mr. Ronnie White followed by a special screening of some silent films with the organ accompaniment.

Our host hotel will be the beautiful new Holiday Inn located just minutes from all the activities. They have extended a group rate of \$79.00 plus tax. Call **601-693-0160** to make your reservation and mention “**Carousel Organ Association**” to receive the group rate.

Check out the rally web site for additional information at [www.steamfest.weebly.com](http://www.steamfest.weebly.com) or contact your rally host Ted Guillaum at 615-226-5098.