AviSys Palm Support Installation

Installation of the AviSys Palm Support Facility

Place the enclosed AviSys Palm Support CD in your CD drive. If it does not autostart, Click **Start | Run** and type **D:\setup,** where "D" is your CD drive letter. Be sure the installer finds the correct instance of AviSys (if you have more than one), and allow it to install in a "PALM" folder as it asserts – that folder name is required. (Example: assuming you have AviSys 5 installed in **C:\AVI5** – the Palm install is then in **C:\AVI5\PALM** – your installation could be different.)

(handwritten: AVI6)

After the facility installation is finished, you need to do four things before you can use Palm support:

1.   Install your Palm software and device, if you haven't already
2.   Install the JFile 5 application
3.   Perform at least one HotSync with your Palm device
4.   Install AviSys Help on your Palm device

Installing Your Palm Software and Device

If you haven't done this already, detailed instructions for installation are provided with your Palm device.

Installing JFile 5

(Find ...AVI5\PALM\JFILE.PRC and double-click it to launch the Palm installer.)

* Start Windows Explorer (Start | Programs | Windows Explorer).
* Find your main AviSys folder, typically C:\AVI4 or C:\AVI5.
* Click the + icon to the left of the folder name to drop down your data set folder(s) and the PALM folder added by this installation.
* Click the PALM folder icon to display its files in the right panel.
* If you can't see all the files' extensions, click View | Folder (Options) and at the Folder (Options) dialog the click the View tab.
Uncheck "Hide File Extensions for known file types."
* In the right panel, double-click the file JFILE.PRC.
* JFILE.PRC will be displayed in the Palm Installer dialog.
Click **DONE**. Do a HotSync, which will install JFile on your Palm device..
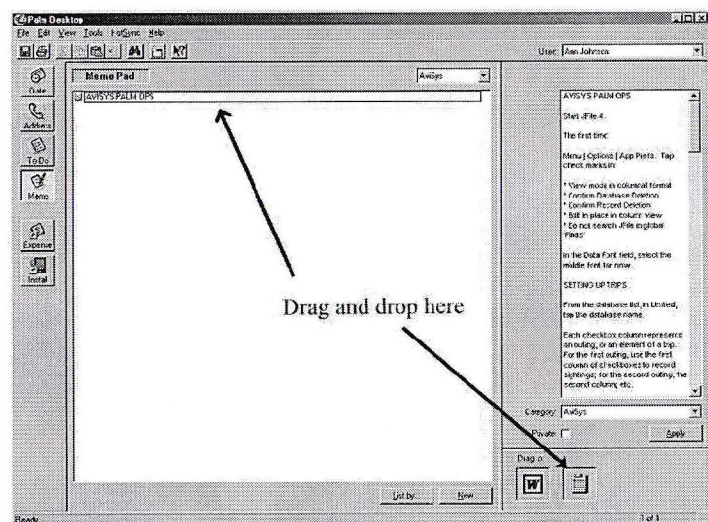
Doing a HotSync

You should have done a HotSync in the above instructions. If you haven't, consult your Palm documentation to determine how to do it with your particular Palm device.

Installing AviSys Help on Your Palm Device

From your Windows desktop, or **Start | Programs** menu, start the **Palm Desktop**, select **View | Memo Pad** or **Memos**. Then click **File | Import** and then browse to the **AVI5\PALM** folder and select **palmops.mpa**. This will install the **AVISYS PALM OPS** memo on your Palm device the next time you do a HotSync. The memo will serve as a Help file while you are operating the Palm.

Additional Steps For Microsoft Outlook / Pocket Mirror

If you have installed Pocket Mirror to sync your Palm with Microsoft Outlook, you will need to copy the help file to an Outlook note. Import **palmops.mpa** into Memo Pad, as described above, and then, drag the memo **AVISYS PALM OPS** to the clipboard icon in the lower right of your Palm Desktop, as shown below.

Go to **Outlook Notes** and click on **Edit | Paste**. Your help file will appear on your Palm at the next HotSync.

Version Requirements
(AviSys 5.00F, or later; Palm OS 3.x or later; JFile 5 or later)

To use Palm Support, you must have AviSys version 5.00F or later. (Help | About AviSys) You can download a free update from 5.x to 5.00F at the AviSys web site, <www.avisys.net> Your Palm OS device software must be at Version 3.x or later. (Menu icon | Info | Version)

JFile must be at Version 5.5 or later, as provided by us.

Support

Support for Palm Operations, including JFile operations with AviSys-created databases (checklists), when used as described in the AviSys Palm Operations documentation, is provided by AviSys Software at **support@avisys.net**.

Direct support questions about JFile5 used with **other** databases to **jlehett@land-j.com**

If you purchased JFile 5 from us, we have registered it in your name with the publisher. **JFile 5 is licensed to you --- it is not shareware and is not to be distributed to others**. A trial version is available at <www.land-j.com>.

There is JFile documentation if you have an interest in more detailed operation of that Palm database program --- JFile Documentation.htm, which will display in Internet Explorer, and JFile Documentation.rtf, which will display in your word processor.

Important Note: If your copy of AviSys is installed with a long path, such as: C:\PROGRAM FILES\BIRDING STUFF\AVI5, when running Palm support you may receive a message, *"...JFile limitation, call AviSys...."*

The JFile program on your PC receives information about file locations by a string on its command line where, among other data, the path to AviSys is repeated four times. Because Windows is fundamentally DOS, there is a 128 character limitation to the length of the command line, which will be exceeded if the path to AviSys is too long. The solution is to back up your data and move AviSys to a shorter path location, such as the default C:\AVI5, and change the "Target" and "Start In" paths in the properties of the shortcuts on your desktop and Start Programs menu. Once you have confirmed that AviSys runs in the new location, delete the old folder at the long path. If you have trouble with this, send us an Email message.

AviSys Palm™ Operations

Overview

The AviSys Palm Operations facility provides:

- The ability to install on your Palm device any checklist you have in AviSys — world, North America, any state or province, any nation, or any custom checklist, whether provided by AviSys or created by you. The number of installed checklists is limited only by the Palm memory, and the checklists are quite compact.
- The ability to install on your Palm device any list of AviSys Places appropriate for the outings you are planning. Each installed checklist can have its own unique list of Places.
- The ability to record sighting data on your Palm device in the field. The data can include the species, date, Place (from the Place list or manually entered) and comment, including quantity. The date, Place, and/or comment can be "fixed," so you can just check off the birds you see.
- The ability to import the sighting data from your Palm device into AviSys. During the import, the data is certified by AviSys for integrity and if problems are found you have the opportunity to correct them.

Concepts

The operations between AviSys and the Palm device are somewhat different than you might expect. That's because most operations performed on a Palm are "synchronized" operations — that is, two sets of data, one on the Palm, and one on the desktop computer, are kept exactly the same. When changes are made to one data set, during a Palm "HotSync" operation the changes are transferred to the other. That works great for your Address Book, To Do List, and other such data sets where it's important that they be kept the same.

In the case of AviSys data, there is no chance all your AviSys data could be stored on the Palm — it would simply roll over and die under such a load. Rather, we are going to use your Palm as a data entry device. We are going to put enough information on your Palm to let you record sighting data when you are in the field. Then you will import those sightings to the copy of AviSys on your computer. When the import is done, the sighting data on your Palm will be cleared (refreshed) making the checklist available for another outing.
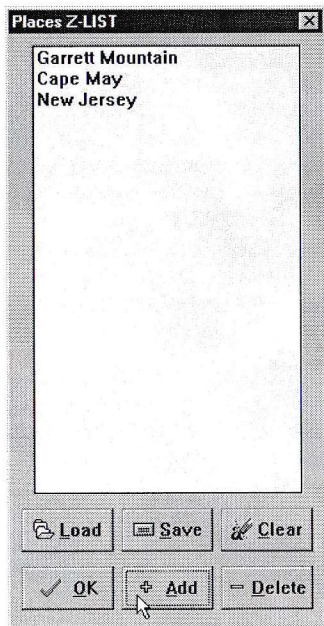
Creating a Palm Checklist

Let's say you are planning a trip to New Jersey (**substitute your own state, if you wish**). To make the list on your Palm smaller and easier to deal with, you want it to include only New Jersey birds. Since you are an experienced AviSys user, we will just instruct you to **invoke the New Jersey checklist** (see pages 26 and 27 in the current User's Guide).

With New Jersey invoked, click **Reports**, select **Checklist**, and select **New Jersey** from the menu. At the print dialog, click **Text File or Palm File**. At the "markers" dialog, select "**No Checkboxes**" and no "**Sighted**" or "**Endemic**" markers. This combination is a special signal to AviSys that you might want a specially formatted Palm checklist. (Don't worry, you'll get another chance to ask for Sighted and Endemics markers.) You are asked "**Make Checklist Output File for Palm?**" Answer, "**Yes**."

You are asked if you want Latin names included. If you have a need for the Latin names, do so, but remember that it may impact the performance of your Palm and take up 50% more Palm RAM.

You are asked if you want ' and " Sighted markers – the markers that indicate if you have seen the species anywhere or in the checklist area – and ! or . Endemics markers. (The Endemics marker, if you use the Nation Checklist Add-On, will choose the character in your Options, or will use . if you have none selected). These markers can be very helpful if you are in a new area and likely to see new birds, or if you will be birding overseas. But they can make the species list a bit more cluttered than you like, and they almost require that you use a larger font selection in the selection described below.

When you are asked to name the file, give it a name that is descriptive of the checklist contents, but you must keep it to **8 characters**, **NEWJERSY** in our case. Be sure to retain the asserted **.CSV** extension. (In addition, AviSys creates a special companion **.IFO** file). All Palm checklist files are stored in a special folder under your base AviSys folder, typically **C:\AVI5\PALM.** If you change the path, AviSys won't be able to find it, so respect the path asserted by the Save dialog.

During this process, the **Places Z-LIST** is presented to supply a list of Places with the checklist.

Check Z-LIST in the User's Guide index. This facility is normally used for multiple Place criteria in reports. In this case, we will use it to create a list of Places to be embedded in the checklist on the Palm, creating a **mini-Places Table**. These would be Places where you will likely be recording sightings. Use the **Add** button to put Places in the list.

For sure, you will want the state (in our example, New Jersey) or a nation if you will be traveling abroad. At a minimum you will use that, along with adding Key Words in the comments when you are entering sighting data, to define locations. If you have some Places in your Sites, Cities, or Counties tables that you will likely be visiting, include those.
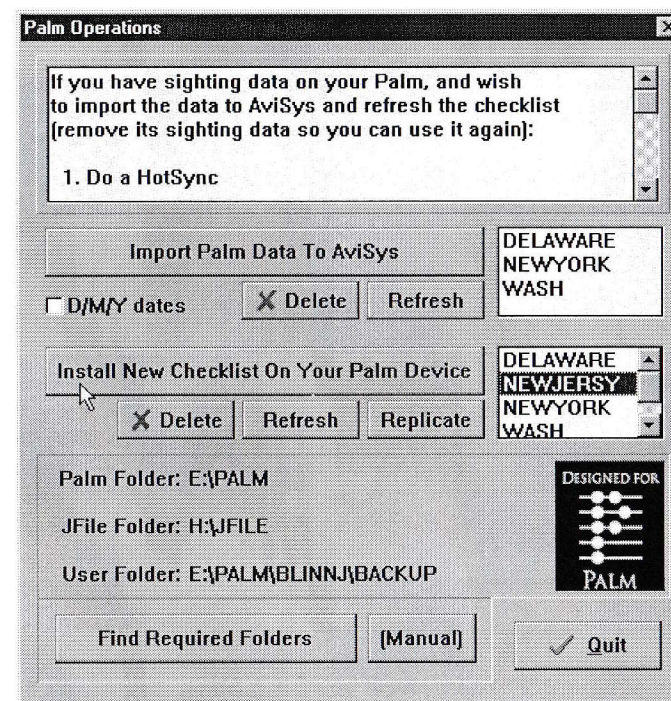
Remember the rules: every AviSys sighting must have a Place, and if that Place is in the

US or Canada, it must be a state or province or a Place linked to one. In this case, in the example above, we have included two famous birding areas we will be visiting in New Jersey.

Don't worry. If, when you are on the outing, you find out you want to use a Place you forgot to add to this list, you will be able to add it right there on your Palm. And if you are uncertain of the actual spelling in your Places tables, you can check it out when you get home and correct it. And if you forget to check it out, the AviSys import facility will let you know if it's bad.

Remember, it's fundamental to AviSys that each of your sighting records has a valid Place, at least a state/province, or a Place linked to one; or, if overseas, a nation. **So you should virtually always have something in the Z-LIST.** (You can ignore this initially, but you'll just have to correct it on your Palm later – the hard way.)

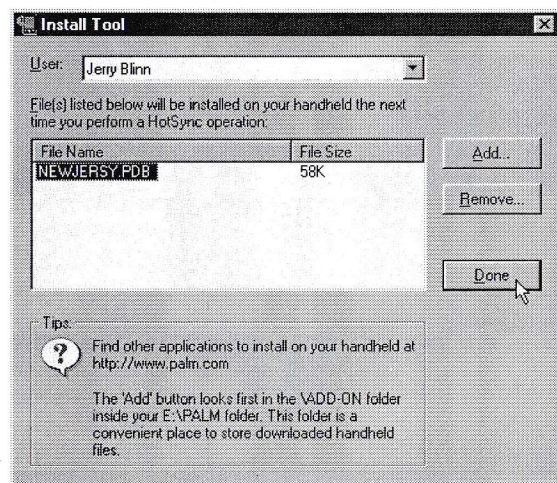## Installing the Checklist on Your Palm

Click **Utils** and select **Palm Operations**. Here's the control center for all your Palm operations.

If paths for the three folders listed are not displayed, click the **Find Required Folders** button. Unless you move some of the software, this never needs to be

done again. If all three folder paths don't get completed, see the special **[Manual]**instructions at the end of this document. (If necessary, see the Appendix at the end of this document.)

Note that **NEWJERSY** (or the checklist you created) is included in the lower list. **Click the checklist name** to highlight it and click the **Install New Checklist On Your Palm Device** button. A Palm **.PDB** database file is created from your **.CSV** file, and the Palm installer is launched.

The Palm Install Tool dialog is presented with **NEWJERSY.PDB** loaded. (If you have multiple users installed on your Palm desktop, you will first be asked to select the correct user.) Just click **Done**, *NOT* **Add** (we've done the Add for you).

Once this is done, **you must do a "Hot Sync"** by pressing the button on your Palm or cradle. The **NEWJERSY** checklist is installed on your Palm Device. (If you are installing multiple checklists, they will accumulate in this dialog until you "HotSync" – **but don't forget that step**.) You will have room for as many checklists as you need. My Palm could hold 300 of these.

It's assumed at this point that you have **JFile 5 installed**. If not, return to the installation instructions and complete that. And, of course, you must have your **Palm software installed**.

Also, **you must have done at least one HotSync** with your Palm device to initialize it.

The Palm Operations dialog suddenly got a lot less intimidating. We just eliminated the bottom third of it with one operation you will probably never have to repeat.

Fundamentally, the dialog is now reduced to just two large buttons: one to put new checklists on your Palm, and one to import your Palm sighting data to AviSys.

The top third is a set of built-in instructions. The **Refresh** and **Delete** buttons will be covered later, but they are of minor importance. The **DMY** checkbox is used only by those who use the DDMMYY date format on their Palm. (Check it now, if you do – AviSys will remember it.) The **Replicate** button provides a quick way to make multiple copies of a checklist, with different names, so you can load your Palm for multiple outings.

Operating the Palm Device

Turn on your Palm and tap the **Home** icon; the application list appears. If the **JFile** application doesn't show, tap the **Home** icon a couple more times to be sure it's not in another list. If JFile still isn't there, refer to the installation instructions at the beginning of this guide and install it. You will also need to re-install the checklist.

Start **JFile**. A list of one or more database names appears. But before using JFile **the first time**, there are a few things you need to do. **This Is Important!** Tap the **Menu** icon, select **Options**, and select **App Prefs**. Tap check marks ☑ in groups **Options 1** and **Options 2**:

☑ View mode in columnal format
☑ Confirm Deletions
☑ Edit in place in column view
☑ Jogdial scroll by page
☑ Maintain records view location
☑ Do not search JFile in global 'Finds' (You may later have reason to uncheck this)
☑ Extra Color (OS 3.5+)

Tap the **Menu** icon, select **Options** and select **Font.** Try the third from the right. It's our preference for visibility in the field, but you may find you like one of the others – the smaller fonts provide more records per screen. If you forget your bifocals, you may prefer the larger font on the right, although we have experienced trouble with the database list being truncated with that one, and it limits the display to 8 records per screen. These selections "stick," so **you won't have to do them again**.

Setting Up Trips

From the database list, find your database, in our case, **NEWJERSY**. The database is installed in the **Unfiled** category, and is visible when the JFile Category is set to **All**. Tap the database name. JFile calls this "Database View" but we'll call it "List View." The screens you see may be somewhat different – **Find** may be a "**magnifying glass**."

Here are the first ten records in the database. (If it doesn't look like this, scroll your Palm list up until it does.)
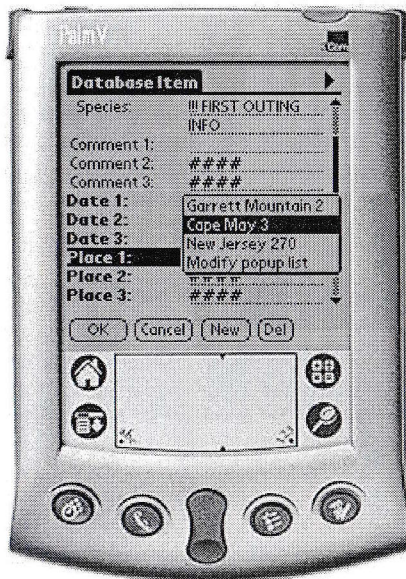
After the header and first three records, it looks familiar — the typical list of species. Notice, however, that there are **three checkmark boxes next to each species**.

This checklist is really three checklists. Each of the three columns of ☑ checkboxes represents an outing, or an element of a trip. If you visit three locations on the same day, use a checkbox column for each location. Or you could use the columns for completely different trips on different days. (If you need more, create more checklists in the AviSys Palm Operations dialog by highlighting a checklist and repeatedly clicking the **Replicate** button. It will create NEWJERS2, NEWJERS3, etc.)

For the first outing, use the first column of ☑ checkboxes to record sightings; for the second outing, the second column; etc.

But, just checking off a bird is not enough. As always in AviSys, you also need a date and Place, and maybe a comment. That's where those funny looking first three records come in. They hold the date, Place, and maybe comment data for each of the three ☑ checkbox columns. They are the "**fixed**" data for each of the outings.

Tap on the first record, "**!!! FIRST OUTING INFO.**" (Tap the name, not the checkbox) This is the data record for the **first** outing. (You need to scroll it up a bit here to show the fields of interest, as shown.) Since this represents the **first column** of checkboxes, note that Comment 2 and 3, Date 2 and 3, and Place 2 and 3, are blocked out. We are interested only in the **first** data items, since we are dealing with the **first** outing, the **first column** of checkboxes.

You need to enter a date — tap the **Date 1** legend (not the **......** edit field) and a calendar pops up, from which you can select a date.

You need a Place — tap the **Place 1** legend (not the **......** edit field) and a list of your AviSys Places pops up. Remember that list you made with the **Z-List**? This is it! Tap the appropriate Place for this outing, even if it's just New Jersey.

IMPORTANT RULE: You need a Place and Date in each OUTING INFO record that corresponds to a ☑ checkbox column you will use. This is fundamental to maintaining data integrity, and the AviSys import facility will double check to ensure that you do so. You can enter the OUTING INFO data before, during, or (preferably not) after the trip. Click OK when you are done.

Entering Sighting Data

From now on, every time you tap a ☑ checkmark in the first column next to a species, a sighting record will result in AviSys with the Place and date you entered in the "**!!! FIRST OUTING INFO**" record. In other words, **you just check off birds!**

Likewise, you can enter Place and date data in the second and third outing information records if you plan to use the second and third columns of checkboxes. **Remember, if you use a column, you must fill in its OUTING INFO record.** (If you forget, AviSys will slap your wrist when you get home.)

What about Comments? And Key Words? And Quantities?

Oh, yes. Suppose you want a Key Word, such as a specific location, entered in each record you check off in a given column. Just place that Key Word in the Comment field of the **appropriate OUTING INFO** record. That Key Word is now "**fixed**," to use AviSys parlance. It will automatically be placed at the beginning of the comment for every record checked off in the related column.

If you want a unique comment in an individual sighting record, after you ☑ check it off, just tap on the record and it will be displayed for you to edit. Now, here's where you must take care. For example, if you want a comment for a sighting checked off in the first column (outing), enter the comment in the Comment 1 field. Sightings in the second and third columns (outings) use Comment 2 and Comment 3 respectively. **The text you enter will be appended to any comment in the associated OUTING INFO record.**

If you are entering a quantity, place it at the beginning of an individual comment field, just like you do in AviSys. The importer will see that it stays at the front, ahead of any OUTING INFO comment.

Always remember, an AviSys comment is limited to 48 characters, including the "fixed" part from the OUTING INFO record. Anything in excess of that limit will be truncated. (AviSys does not support Field Notes on the Palm at this time, but read the hint about **Memo Pad** for a solution.)

You may also have some favorite Attributes that you use. While we don't supply the Attributes table on your Palm, you can certainly enter them in the comment manually, such as **/h** for heard-only. Remember to enter the "slash," which is performed with a tap, followed by a downstroke to the left on the numeric pad.

What if I forget to include a Place in the Z-LIST?

That's OK. Just tap the **......** edit field for the appropriate Place in an INFO or sighting record, and type, or Graffiti, the name of the Place, exactly as you have it spelled in your AviSys Places tables. (You didn't know "Graffiti" is a verb, did you.) The only warning is, if you have more than one Place with the identical name, such as Washington state, and Washington county, AviSys will pick the first one, starting with Sites, in the Places Tables. (OK, you probably noticed the numbers after Place names in the popup list — that's how AviSys knows *exactly* which Place to use when the Place came from your Z-LIST. See "Cape May 3" in the illustration, above.)

If you will be using an added Place a lot, tap **Modify Popup List** in the Place popup, and add the Place there.

What if I want a record for a Place that's not in the OUTING INFO record?

That's OK, too. We call that **OVERRIDE**. For any individual sighting records, you can override the INFO record! Suppose you have been busy recording sightings at Cape May, and after you are done, and on your way home, you see a Kelp Gull at Kennedy Airport. Just tap on the Kelp Gull record, and enter "New York" in the appropriate Place **.....** edit field. And if it's a different date from the INFO record date, enter a new date. This date and Place will **override** the data in the INFO record for this sighting **only**. (You could just as easily have used "Jamaica Bay" if that's in your Places table.)

What if I want to record more than one sighting of the same species in the same outing column?

In that case you need to duplicate the species record so you have three more check-off columns for it. Tap on the record to get a "Record View" of it. Tap the **Menu** icon, tap **Record**, and tap **Duplicate Record**. Tap **OK** for the record view, and you are returned to list view. The new record has been placed at the **beginning** of the list — you may have to scroll up to find it. **Be sure to clear out the old sighting data in that record — it's been duplicated, too!** (To delete a record, go to "Record View" of it and tap the **[Del] or Trashcan** button.) **Note:** sorting the checklist on the **Seq** field will place new records back with their parent records (**Menu | DB | Sort Items | Primary Sort Field = Seq**).

I saw an Elegant Trogon in Connecticut! What do I do?

What? The Elegant Trogon isn't in the Connecticut checklist? In List View, tap **Add**, enter "Elegant Trogon" in the Species field, and OK it. You are ready to go.

Just check off the sighting. Prepare to defend yourself in a special hearing of the state records committee.

OK! I've got it! I can be simple, and fill in as many OUTING INFO records as I need, and just check off birds; or I can get complicated and use OVERRIDES!

Good! Just like AviSys, you can use this in a simple, straightforward way, or you can get fancy.

How do I get to the bird? This list scrolls really slowly!

Oh, do we have that one covered!

First, there's the **Find** operation. In list view, just tap the **[Find] or magnifying glass** icon. (Leave "Field To Search" at "All" for now.) Type, or Graffiti, a meaningful fragment of a species name — just like you do in AviSys. If you get a hit too early in the list, tap the **[+]** button, which is the same as **Next** in AviSys. For example, tap **[Find]**, type or Graffiti "**house**", then tap **[Find It] or OK**. The list will jump to *House Wren*. Tap **[+]** and it jumps to *House Sparrow*, thence to *House Finch*.

If you have **Latin** names installed, Find works for a single fragment of either the genus or species name. Right now, it is searching in all columns, so there could be some interference caused by hits of a Latin fragment in an English name, or vice versa. (See **Hints**, below)

If you haven't tried Band Codes, now is the time! That's An Order!

Most important, there's the **Band Code** process. If you don't use band codes in AviSys, I urge you to go to that part of the User's Guide and learn about them right now. **Getting to the bird is the singular most important function in birding software**, and using band codes is by far the quickest and easiest way to get to species. Learning the simple band code construction rules takes just a few minutes, and just a little bit of practice. I promise, **you'll never turn back!**

(And if you haven't yet learned **Graffiti** for Palm, I recommend that, too, but the keyboard is easy to invoke and use.)

On your Palm, you use band codes just like a **Find** operation, except that you use the band code instead of a name fragment. With North America-based checklists, and most world-based checklists, about 85% of the time you'll **jump directly to the bird**. In the event of a "collision," instead of the drop-down list you get in AviSys, just use the **[+]** button to take you to the next hit. (Occasionally, you might hit a combination of letters in a bird name that matches a band code. See the **Hints**, below.)

Note: this facility does not use the "special" Banding Laboratory band codes for collision species. Only bird banders know those anyway, and they are too hard for

the average user to remember because we don't use them often enough. We use the [+] button, instead.

For practice, tap **[Find] or magnifying glass** and type or Graffiti **btgw** Bang! You jump to Black-throated Gray Warbler. Tap **[+]** and you jump to Black-throated Green Warbler, the next match (assuming the checklist you are using has those species)**.** This is one of the 15% collisions, and it takes only one tap longer.

Now we're cookin'! With a few swipes of the stylus you Graffiti a band code, and jump right to the bird in a list of hundreds. You tap the ☑ check box, and the sighting is done!

Important Suggestions – OK, They're *Orders*

Because of the nature of this facility, there are some things we can't control. In AviSys, it is extremely difficult to do something really dumb — the level of malice required leaves no room for sympathy for the miscreant. A very large part of the code in AviSys watches your every move and ensures you are doing productive, not destructive, things.

Because JFile is a general purpose application, with facilities for creating, modifying and updating all databases, there are some very destructive things you can do on the Palm if you put your mind to it — and I know there are some very creative people out there. Here are some rules, and they do not include every destructive thing you could do — we trust that your instinct and conscience will warn you if you are getting dangerous:

- Don't change a database structure — you simply won't be able to get your data into AviSys.
- Don't change original parts of a checklist, such as species/family names and **!!!** or ** record tags. AviSys will choke on input, and you'll have to make corrections to import your sighting data.
- **DON'T SORT** a checklist **unless you have real reason to**. It's easy to do, but both you and AviSys expect the records to arrive in a certain sequence — if you sort it, AviSys may not be able to import it. **But, if you do sort it,** there's a way out — sort it again, but on the **Seq** field, which will put the records back into their original position, except for added records, which will end up next to their parents.

Importing Your Sighting Data into AviSys

Now that you have a bunch of sightings, you need to get them into AviSys. Here's what you do.
- Go home
- Start AviSys and load the proper AviSys data set if you have more than one.
- Connect your Palm and press or tap the **HotSync** button and let it finish.
- Click **Utilities** and select **Palm Operations**
- At the Palm Operations dialog, click on the Palm checklist you want to import into AviSys, such as **NEWJERSY**, and click the **Import Palm Data To AviSys** button.

- The import will proceed with a few prompts. AviSys will cause the Palm format data to be converted to a text file, will parse the text file to extract the data, and will create AviSys format records. Sighting records matching those you entered in the Palm will then be added to AviSys.
- After the import, the Journal will be displayed so you can see what was added. (Good reason to start your import with a fresh session so only the imported records are listed.) Also, with your approval (which you should almost never refuse), the checklist on the Palm will be refreshed to clear its sighting records so you can use it again.

What if I forget if I clicked the Import button?

First, check the Journal. If you still can't tell what you did, just click the Import button again. If you had previously imported that data, you will receive an error message telling you so. If you try to import a checklist a second time after it has been refreshed, AviSys will start an import, but will then tell you it imported no records. You have to have real malice to duplicate sighting records.

I did a HotSync. Can I now delete the checklist from my Palm?

Not until you've done the Import! When you delete a checklist from your Palm, it also deletes it from the upper (Import) list. Be sure you've completed the import before deleting a checklist. But see the paragraph *What If I Deleted My Important Data!* below.

What if my birding partner and I have separate data sets? Can I import into both?

No! Risky scheme! But remember that the Journal displays when you import your Palm records. You can then Export the records to a **Sighting Record Stream**, and then transfer them to your birding partner's data set, with the option to filter records your partner didn't see. (See **Sighting Record Streaming** in the AviSys User's Guide)

I checked off a lifer and my Sighted markers weren't updated on the Palm!

The sighted markers on your Palm (if you choose to have them) are taken from the checklist in AviSys at the time you created the Palm checklist. They do not get updated. To update the Palm sighted markers, **after** you have imported your sightings, create the checklist again, with the same name. Use the "Install A New Checklist…" button to update the Palm checklist.

AviSys Data Integrity Checking

The AviSys Palm Operations facility makes sure the data it imports is good. Every single record is checked to ensure it is in the proper record format and meets all AviSys requirements for integrity.

The Palm Operations facility has 94 error messages. You will probably never see any of them. They cover the gamut of possible errors that could affect your data during import. Most of them are pretty self explanatory, such as:

Place 1 not in Places Tables – Gomorrah

…which means you manually added Gomorrah on your Palm and it doesn't match an existing Place in AviSys. You can fix it on your Palm, or add it to your Places Tables, and start the import again.

First Outing Info Date Format invalid

…which means exactly what it says. Look in the First Outing record and see the date you entered as 6/31/2000 because you did it manually in the Date edit instead of using the calendar. MM/DD/YYYY

All records are checked for validity **before** they are actually imported into AviSys, so if you have problems in your Palm database you can correct them before they are committed to AviSys. We cannot, however, fix that Willow Flycatcher you recorded as a Cordilleran Flycatcher.

That's It! You Don't Really Need Any More!

You've been through the complete Palm Checklist/Data Entry/Import cycle. The rest of this document covers any "What Ifs" you might have, and suggests refinements in how you use the Palm support to make the experience even easier and better. While you might not need it, **we suggest that you read through the rest of this at least once** to see if anything applies to how you do your birding data entry.

HINTS AND FACTS

Here are some hints that are important if you use one of the older, slower Palm models and large checklists:

- If you use **Find** species most of the time, in the **Find Item** dialog, at the **Fields to Search** legend, tap the drop-down arrow and select the first **Species** field. That way the program will search only that field and you'll get the result much faster. The selection will "stick."
- If you use **Band Codes** most of the time (which you should), in the **Find Item** dialog, at the **Fields to Search** legend, tap the drop-down arrow and select the **Code** field. That way the program will search only that field and you'll get the result much faster. You'll also avoid those matching letter combinations in the Species field. The selection will "stick."
- If you use Find on **Latin** names, you can select the **Genus** or **species** field. We suggest you try sticking with **All**, and put up with the occasional stray hit on an English name. That way you can use fragments of either genus or species name without changing the field all the time.

Here a some other hints and facts:

- We don't use BackUp Buddy or other Palm backup utilities. We have no way to determine if they will have an adverse impact on how the Palm device,

16

JFile, and AviSys work together. Fundamentally, nothing should interfere with the standard Palm software process of placing a HotSync'd database in the …/UserName/Backup folder. You may have to correct settings in the utility to ensure compatible behavior. Also, see **Special Buttons**, below. We would like to hear from you if you are using one of those utilities successfully or unsuccessfully.

- In List View, at the top of the screen are **double Up** and **double Down** (not Blackjack) arrow icons. Tapping those icons will take you to the **beginning** and **end** of the species list, respectively.
- Don't bother scrolling the records horizontally to examine a record in List View. The fields are so far apart that you will lose track of which species you are on. Tap on the record to use Record View.
- When in List View, you can tap a field column header, specifically one of the "1,2,3" legends over the ☑ checkboxes, to get a menu containing **Column Totals**. Tap that item to see how many species you have recorded in that column, but **subtract 1** for the Outing Info record. Be very careful — on that same menu are the **Sort** and **Set Column Width** items, which can cause trouble.
- When in List View, you can tap a field column header, specifically one of the "1,2,3" legends over the ☑ checkboxes, and select **Sort:Reverse** to see **all the species you have seen so far** in that outing grouped together. Tap **[Menu] | DB | SortItems | Sort Field = Seq | not reversed**, to return to taxonomic sequence.
- If you do succumb to the temptation to set column widths, and a **column disappears**, go to List View, tap the **Menu** icon, tap **DB**, and tap **Show Hidden Columns**. The column you extirpated will be resurrected.
- If you tap on a species record, and scroll down to the Code field, you will see the band code for that species.
- If you tap on the FIRST OUTING record, and scroll down to the Code field, you will see the AviSys Copyright for the world band codes, which are an AviSys exclusive feature.
- If you tap on the SECOND OUTING record, and scroll down to the Code field, you will see the AviSys data set name from which the checklist was derived. The AviSys import facility uses this to warn you if you are importing into a data set different from the one which created the checklist and, most important, the one from which the Places were derived.
- If you tap on the THIRD OUTING record, and scroll down to the Code field, you will see the actual AviSys Place name (checklist name) from which the Palm checklist was created. If you ever can't remember where you got the "MyTrip" database, this is where you find out.
- If you check off a Family name or OUTING INFO record, the checkmark will be ignored.
- Remember: you can use the "rocker" scroll buttons at the bottom of your Palm to page through the checklist 10 records at a time.
- You can add a record to the **Memo Pad**. In Record View, tap the **Menu** icon, tap **Record**, and select **Export to Memo Pad**. You can append information as a **Field Note**.
  Later, when you import your records, and the Journal is displayed, you can start your **Palm Desktop** program, click **View | Memo Pad**, select the memo from the list, block the memo text, and select **Edit | Copy** (Ctrl-C). In the

17

Journal, highlight the record, click the **Note** button, and press Ctrl-V, or select **Edit | Paste**, to paste the memo contents into the Field Note.

- Yes, PalmPrint is supported. To print the database, in List View, tap the Menu icon, tap Tools, and select Print Records. In Record View, you can print the current record. PalmPrint is a separate application available from <www.stevenscreek.com>
- You can **Beam** a checklist to another Palm device. At the JFile screen displaying the JFile databases, tap the **Beam** button, and then tap the database (checklist) you wish to Beam. The various checklists provided in AviSys and the Nation Checklist Add-On are copyrighted. However, you have permission to beam a single checklist for one-time trial use by another birder. If the birder happens to be an AviSys user, **the sighting data will have to be entered manually** in AviSys since the required IFO file is not also beamed with the database.
- Similarly, you can delete a checklist by tapping the **Delete** button or **Trashcan** icon.
- If you find that keeping track of three ☑ checkbox columns is confusing, or leads to recording errors, you may want to simply use only one column in each checklist, and use multiple checklists if needed. Choose the column most comfortable for you, probably the right hand one. Fill in just that column's OUTING INFO record. If you accidentally check a wrong checkbox, AviSys will point it out to you during an import attempt, and you can correct it. This way, you can use the facility just as if it has only one checkbox column.
- You can instantly switch between checklists by clicking the "filing cabinet" icon when viewing a checklist.

If you are birding world-wide, you really need individual nation checklists. See the AviSys web site, <www.avisys.net>, and the recent versions of the User's Guide, for information about the Shawneen Finnegan Nation Checklist Add-On.

Make It Easier To Hit The Correct ☑ Checkbox

When you are bouncing down the rocky roads of SE Arizona in a van that needs new shocks, or if you are swaying to the sickening swells of a Monterey Bay pelagic expedition, it might be a little difficult to hit the correct checkbox column to enter your sightings. Here's how to make that easier:

Let's say the current outing is to be recorded in column 2, the one headed with, believe it or not, a "2." In List View, tap the "1" over the first column, and select **Set Column Width** from the resulting menu. Notice that a fine vertical line appears to the right of the "1" column. With your stylus, **drag** that line to the left until the "1" column just disappears. Now, tap the "3" over the third column, and do the same thing (being careful to not drag too far, also wiping out the "2" column). **The only column left is the "2" column, the one you need.** You can't miss it! So for the current outing, you will have no trouble hitting the mark.

To restore the columns so you can see all of them, in List View, tap the **Menu Icon** (in the lower left of the screen) and select **DB**, then **Show Hidden Columns**. Some of them will be much wider than you need, truncating the species names, so

use the **Set Column Width** technique to restore them to the widths they should be – or to change the display to show only the next outing.

Practice this a few times so that you won't forget how to get the columns back in view after you've hidden them – that could be very disconcerting in the middle of a trip. This can take a bit of manual dexterity but, once you get it down, it's well worth it.

To simply hide the first column, after you've finished the first outing and are using the second outing, tap the big right-arrow in the upper right corner of the screen – you will scroll past the first column, hiding it. Tap it again, and the second column will be hidden. Tap the big left arrow to restore them.

Special Buttons in the AviSys Palm Operations Dialog

While AviSys, JFile, and the Palm software conspire to keep things in good order, there may arise an occasion where a file that shouldn't be there exists in either of the two lists. You can highlight any item and click the **Delete** button to remove it. If there is more than one file associated with a name, such as a .CSV file and a .IFO file, both will be deleted.

Remember, though, if a checklist exists on your Palm, you open it, and do a HotSync, that file will appear in the upper list, even though you had just deleted it. **The proper way to remove a database is to first delete it on your Palm – after its data has been completely imported**. After the next HotSync it will disappear from the upper list. If you never want to install a given checklist on your Palm again, use the **Delete** button to also delete it from the lower list. Caution: if you install other, non-AviSys, JFile databases, they may (rarely) show in the upper list. Don't delete them and don't try to import them into AviSys!

What If I Delete My Important Data By Accident!

Here's a special secret. When you delete a checklist on the Palm, and then do a HotSync, **it's not really deleted** on your computer. Instead, it's moved to your …Palm\<UserName>\Archive folder. Using Windows Explorer, find the "deleted" PDB file and copy it to the …Palm\<UserName>\Backup folder. (The IFO file was never deleted.) The checklist will magically appear in the Palm Operations dialog upper list and you can import its data. You've been saved!

If you accidentally delete a checklist from the upper list with the Delete button in the Palm Operations dialog, it is also moved to the Archive folder, but the extensions of the related files are changed to .PDX and .IFX. To recover the data, copy the files to your Backup folder, just like above, but then rename the extensions back to .PDB and IFO.

If you accidentally delete a checklist from the lower list with the Delete button in the Palm Operations dialog, it is also moved to the Archive folder, but the extensions of the related files are changed to .CSX and .IFX. To recover the data, copy the files to your …AVI5\PALM folder, and then rename the extensions back

to .CSV and IFO. Of course, these files can also be re-created in AviSys with the Reports | Checklist facility as described in the beginning of this document.

The Refresh buttons

The Refresh buttons will cause AviSys to read the file names into the lists. That will be required only if an operation, such as a HotSync, takes place that changes files when AviSys doesn't know it's happening. It's unlikely you will ever have to use either Refresh button.

The [Manual] button

Normally, the **Find Required Folders** button, used the first time you invoke the Palm facility, finds all the folders required to export and import checklists and data. However, unusual file locations could cause it to miss one or more folders. The **[Manual]** button opens the configuration file, **AVIPALM.INI,** in NotePad. You can enter the various folder paths directly into the file. Extensive instructions at the beginning of the file will guide you.

Expansion Cards

J-File 5 supports expansion cards, but since AviSys checklists are so small, you really have no reason to use them. However, you can transfer AviSys checklists back and forth between RAM and expansion by tapping the "chip" or "card" icon after the database "lock" icon. **NOTE:** Palm HotSync does not recognize databases in expansion – a checklist must be in RAM to transfer to AviSys on Hotsync.

Why Did You Choose JFile 5 For This Facility?

We chose JFile 5 because:
* it is the most popular database program for Palm
* it is easy to use
* it has a solid reputation for reliability
* it has been around a long time
* it has continuing support
* it is reasonably priced
* it has a highly effective programming interface facility that AviSys capitalizes on

There are hundreds of JFile databases, most free, at various Palm Internet sites. For instance, we use a Periodic Table of the Elements database, which helps with crosswords, a very handy Conversions database with such formulas as millimeters to inches, and a database of 370 Latin phrases that we use frequently during support calls. For support for problems with JFile (**not** problems with AviSys Palm operations) and to make suggestions for enhancements, send an Email to <support@land-j.com>.
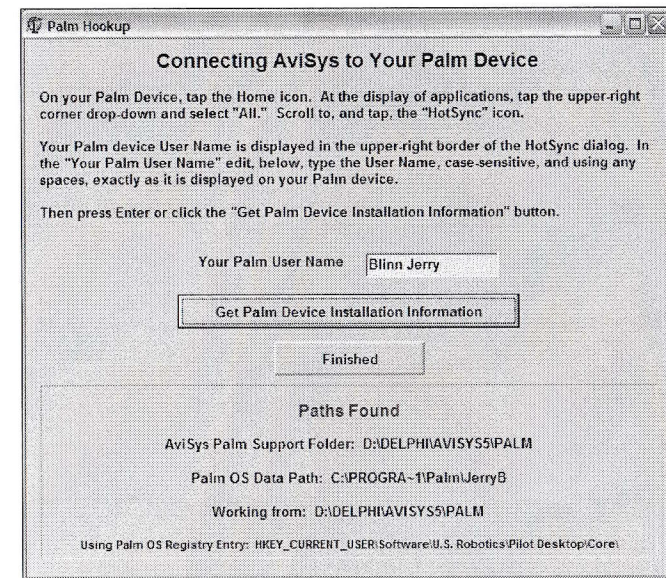
Now, slip this manual into the AviSys User's Guide, binding edge out.

Appendix: GETPALM.EXE

The first time you use the facility, when you click **Find Required Folders** in the AviSys Palm Operations dialog, GETPALM.EXE, shown above, is launched. This program finds all the folders required for AviSys Palm Support to operate, places those paths in a special .INI file, and posts the paths under **Paths Found**. You need to supply your Palm Device user name – instructions are provided to do so.

If this program is unable to find the paths, you need to click the **[Manual]** button to open the file AVIPALM.INI in **Notepad**. There are comprehensive instructions provided at the beginning of the file.

This data is provided here, out of the way, because this program is used only once in the life of any Palm device, and invariably does the job without intervention.