Memorandum

ik
To: Deepika Nagaraj   Mike Lambeth

cc: Michael Lacasse   Dave Schmitt   Neil Horner   Tony Kerr
Ralph Groves   Michael Reynolds   Matt Morgan

From: John Effland

Date: 2008-06-10

Revs:

1.0	2008-04-23	jee	Initial
2.0	2008-04-24	jee	Added input for initial screen, device selection, changed status screen, and removed `Add Event` screen
3.1	2008-06-10	jee	Updated to align with current Preamp Screen design

Subject: Internet Browser Screens to Manage Band 6 Preamp Construction

1. Introduction

This memo provides updated screens for the browser-based design to manage Band 6 preamps, and attempts to consolidate requirements into a single document, because there are too many e-mails with suggested design enhancements which render it difficult to know exactly what is being designed.

The memo is also written in response to Deepika's latest e-mail of the proposed design, dated Monday, June 09, 2008 2:15 PM, which discussed her latest Internet browser screen, Figure 1. Documents describing previous design versions are available from hyperlinks in the above Rev table.

Screen designs presented here incorporate the fields from tables defined in Ver. 2.4 of the database schema, reproduced in Figure 5.

Finally, note that it is important to distinguish between the preamp status screen, proposed and outlined in Figure 2, and the `Add/Modify` screens, shown in Figure 3.

1.1 Preamp Status Screen

The proposed preamp status screen of Figure 2 includes the following features:

1. Selection of preamp of interest by selecting the serial number from a select box.
2. Modification of attributes of the selected preamp by pressing the `Modify` button.
3. Selecting the mixer to which this preamp attaches using standard nomenclature:

   Part of Mixer-preamp 155 : 235 /133 :17

   where the mating mixer screen is obtained from the 155 hyperlink, and the matched preamp screen from the 133 hyperlink. If no such pairing exists, then the hyperlink is not present.

4. Warm and cold measurement data are available by selecting the appropriate hyperlinks. Note that old measurement data are still available by selecting the appropriate hyperlink in the Events table located at the bottom of the status screen.
5. The HFET wafer and chip parameters are available from the table at the bottom of the screen.
6. The notes table at the bottom of the screen contains notes (entered using the Add/Modify screen) and I have included an example set from our latest mixer shipment to ACC.

Note that no changes can be made to any entries from the status screen. The `Modify` button located at the top of the screen must be pressed to add or change information, as described in the next section.

1.2 Preamp Add/Modify Screen

Additions and changes to preamp information occur from this screen, shown in Figure 3. The all-important `Update Record` button is located at the top of the screen.   This screen has the following features:

1. Removing a preamp, either from a mixer or from a matched pair, is accomplished by pressing the `Remove Preamp` button, which automatically records the date of removal. The user should probably be forced to enter notes about what is removed.
2. Entering either warm or cold measurement data is accomplished by updating the next two lines, and pressing the `Select File` button allows the user to choose the Excel data file and path.
3. Entering or modifying HFET wafer data *etc*. is problematical with this approach, because the program won't know if the user has entered any changes unless all the boxes are either blank or already contain the relevant information.
4. Location information about the preamp is entered using the Notes section at the bottom of the screen.

1.3 Common Screen Elements

The `Bugs/Enhancements` button loads the software bug tracking web page, which will soon be upgraded to allow requests to enhance software in addition to tracking bugs. A `Help` button loads an HTML help file.

Table 1 and Figure 4 describe the common drop-down box located at the top of each page.

Figure 1: Proposed Update Screen from Nagaraj, dated Monday, June 09, 2008 2:15 PM
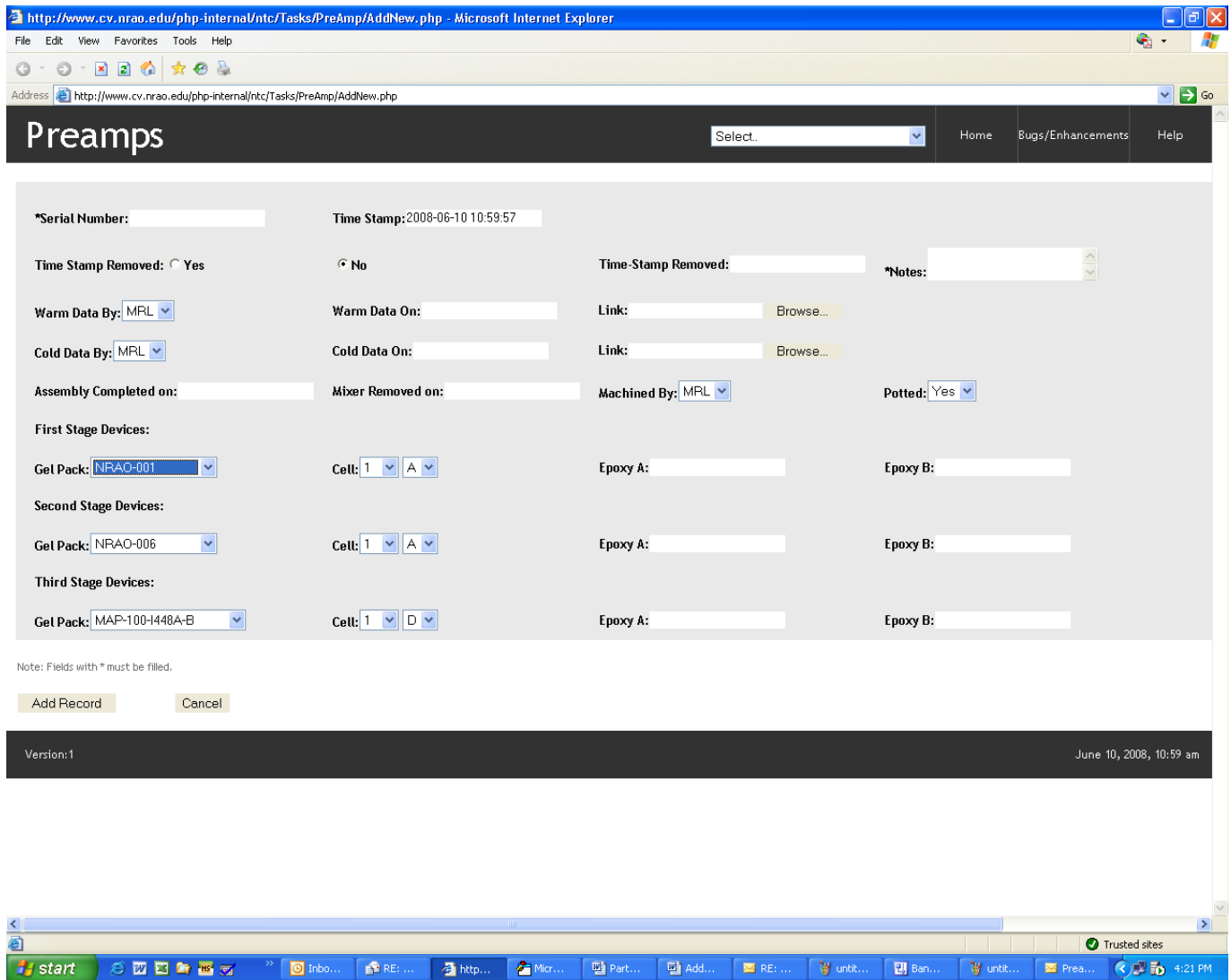
Figure 2: Proposed Preamp Status Screen

Preamps	Modify	Select..	Home	Bugs/Enhancements	Help

Serial # 235 ▾	Part of Mixer-preamp 155 : 235 / 133 : 17	Location: Desiccator on 2008-04-24 09:45

Warm Data on: 2008-04-24 09:45 by: ML	Cold Data on: 2008-04-24 09:45 by: ML

Stage	Gel-Pack	Cell	Epoxy A	Epoxy B
1st	NRAO-001	A10	PB012345	PB135673
2nd	NRAO-006	D4	PB112345	PB112345
3rd	MAP-100-2006-09-A	J2	PB112345	PB112344

Events

Date[1]	Location	Who	Data	Notes
2008-06-11 23:22	Desiccator	ML	Link	Preamp installed in mixer block
2008-06-11 23:22	Desiccator	ML	Link	Preamp matched with another
2008-06-11 23:22	ATS	ML	Link	This preamp was measured cold today but the ATS has temperature problems bla bla bla
2008-06-11 23:22	Mxr Assm Lab	ML		Warm tested
2008-06-11 23:22	Mxr Assm Lab	ML		Active devices installed
2008-06-11 23:22	Mxr Assm Lab	RG		Blocks received from ACC - passive components inserted
2008-06-11 23:22	ACC	RG		Blocks returned to ACC
2008-06-11 23:22	Mxr Assm Lab	MR		Screw holes cleaned out
2008-06-11 23:22	Mxr Assm Lab	ML		ACC returned block, can't fit screws in lids
2008-06-11 23:22	ACC	RG		Preamps shipped to ACC
2008-06-11 23:22	Mxr Assm Lab	RG		Blocks given to Gerry today to be plated

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[1] Events are ordered chronologically with most recent at top.

| 2008-06-11 23:22 | Mxr Assm Lab | RG | | Blocks cleaned for plating |
| 2008-06-11 23:22 | Mxr Assm Lab | RG | | Blocks received from shop. |

Figure 3: Add / Modify Preamp Screen

Add/ Modify Preamps	Update Record	Select.. ⌄ Home Bugs/Enhancements Help

Serial #	235	Remove Preamp	

Warm data by:	ML ▼	Warm data on:	2008-04-24 09:45		Select File
Cold data by:	ML ▼	Cold data on:	2008-04-24 09:45		Select File

Stage	Gel-Pack	Cell	Epoxy A	Epoxy B
1st	NRAO-001 ▼	1 ▼ 1A ▼		
2nd	NRAO-001 ▼	1 ▼ 1A ▼		
3rd	NRAO-001 ▼	1 ▼ 1A ▼		

Enter Notes			
Location	**Who**	**Data**	**Notes**
ACC ▼	ML ▼	Link	Type notes here

| Table 1: Items in `View All` Drop-Down Screen ||
Item Text	Action when selected…links to
View All	list all preamps in database
View New	list all preamps with no entries
----------------	divider
Account Nums	Band 6 account number web page
Bugs	Software bug tracking web page
Leave Schedule	NTC leave schedule
Phone Book	NRAO phone book
Plating Jobs	NTC Plating job listing
NTC Tasks	NTC task web page
NTC Conf Room Sched	Conference room schedule
NTC Penthouse Sched	Penthouse schedule
Tasks Database	Band 6 task database web page
Shop Jobs	NTC machine shop job listing

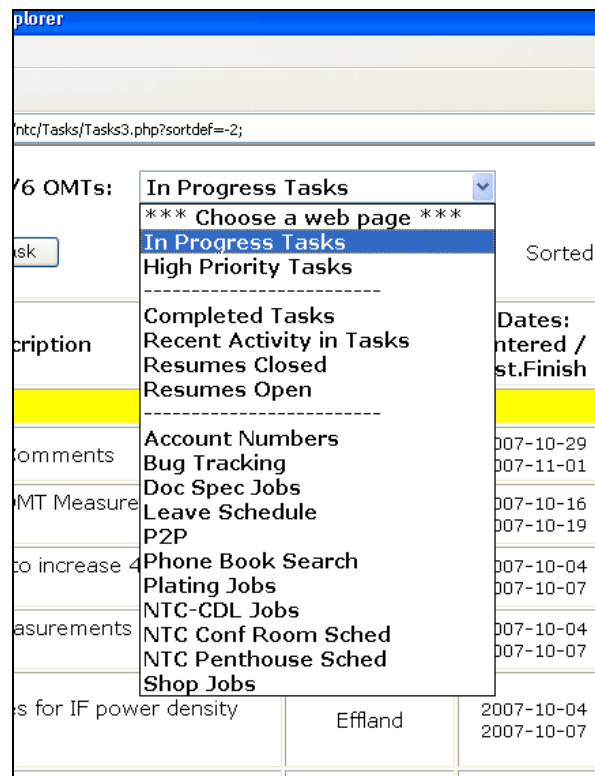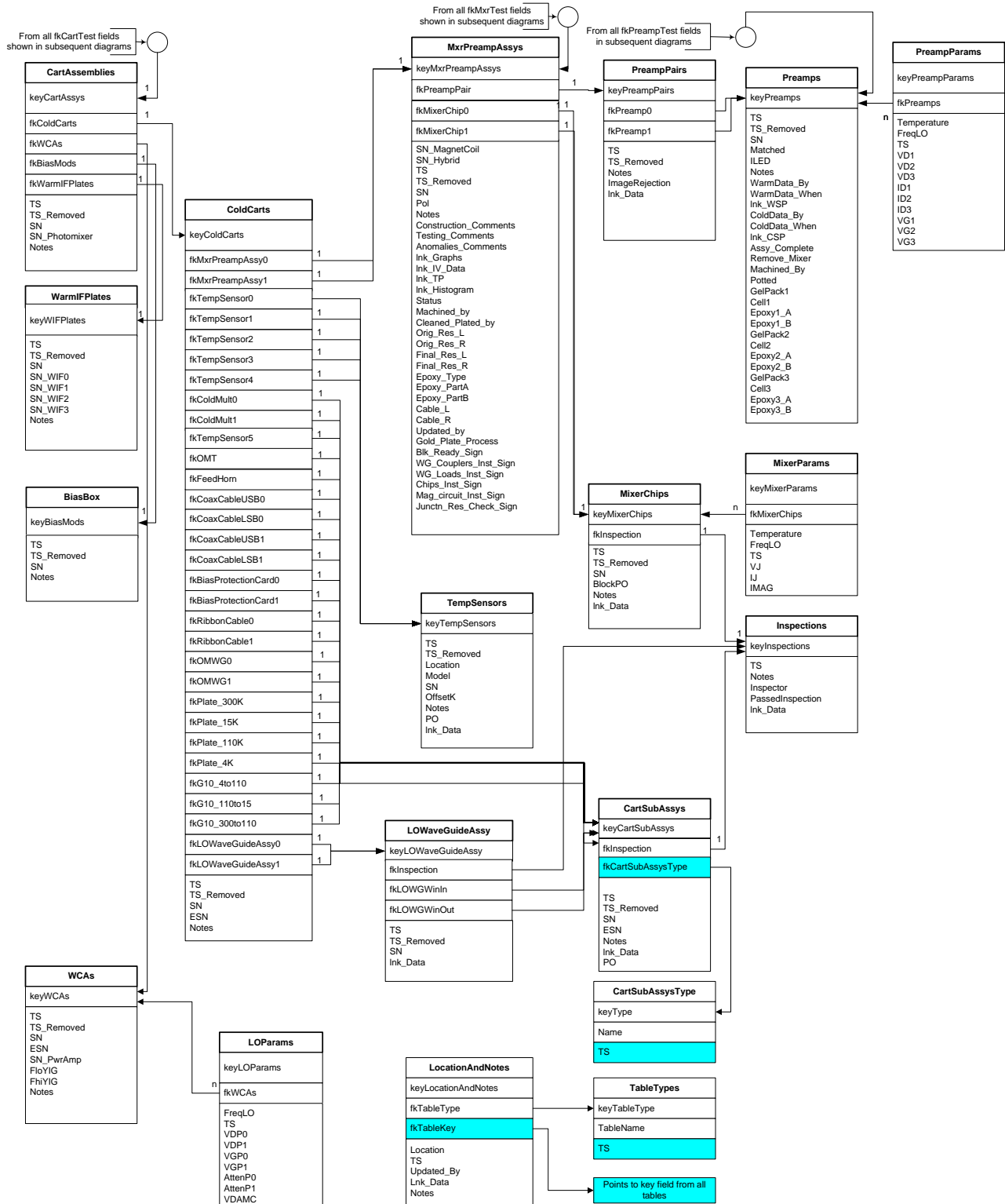**Figure 4: Sample drop-down box from Band 6 Tasks Software**

Figure 5: Database Schema Ver. 2.4