NMR NOTES #10
Computerized Reservation System

This system is used to reserve instrument time on all of the open access NMR instruments. There is a video terminal at each of the instruments that will both display the current reservations and permit users to make or delete reservations. It is also possible to get details of an existing reservation, including who made it and when.

This program is also available for remote access, making it possible to make a reservation from any computer or terminal with access to the campus ethernet. The reservation program is menu driven and self-explanatory. Context-sensitive help may be obtained by pressing ^G at virtually any of the menus. ^G means hold down the control key while presing the G key. The ^ symbol is used throughout the program documentation to denote using a control key.

In order to access the reservation system, login to the machine nmrsun1 and use the username reserve. No password will be required. The system will ask for the terminal type that you are using so that it will know how to position the cursor on the screen, and will want to know which instrument you wish to access. Not all systems will available initially, and the system will indicate that it cannot find the appropriate user files for systems that are not yet available. Once you have selected an instrument, the system will ask for your user name and password ON THAT SYSTEM. At 3:15 every weekday morning, the passwords from the various instrument systems will be automatically merged into the reservation system data base. This will only happen, however, if the instrument limnet card is functioning properly. Therefore, it may take a day or two for a new password on the instrument to make the move to the reservation system. In that case, continue to use your old password. When it fails, the new one should work. There is currrently no provision for directly changing your password in the reservation system.

Once you have logged in to the reservation system, you may enter your personal information in the data base. A lab number and phone number are required, and you may also enter your full name and an email address. The full name may be especially useful if the 6-character instrument user name is especially cryptic.

All times on the system are stored in a 2400 hour format, in 10 minute increments. 1330 represents 13:30 or 1:30 PM. When times are entered, the : is not input, although it will be used to display times. In order to make or delete a reservation, you must have write-access to the data base. Only one user at a time can make a change in the data base, so that two users do not reserve the same time block. The data base is broken up with one file per day, so that you can make a reservation today while someone else is making a reservation for tomorrow. This also means that you cannot make a reservation that spans midnight. If you attempt to make a reservation while someone else has write-access to the data base, a pop-up box will appear in the lower right corner indicating that the system is waiting for the file to come free. The system places you in a queue waiting for access to the file. Access is granted in the order that requests are received. Once you gain access, a 30 second timer starts running in the top right corner. If you have not selected your reservation before the timer runs out, access is given to the next user in the queue. If you delete a reservation, access to the data base is requested after the reservation is selected. Any time the system is waiting for write access, you may press ^\ to abort the request. In this case, no reservation will be made or deleted.

Once you have logged into the system, you can make multiple changes to the data base, making and removing several different reservations. Each access to the data base will require a separate write-access, however. No single user will have write access to the data base for more than 30 seconds at a

time, so access should be fairly quick except when a large number of users are trying to make reservations at the same time. Once you gain access to the data base, the reservation display will be updated so that you will see reservations made while you were waiting for access to the data base. There is a flip command that will flip the reservation pop-up box to the background so that you can see all of the reservations.

The reservation system will test for valid reservations before making a reservation. If the system refuses to make a reservation, you have the option of examining the rules that the system is using as well as the details of you reservation request.

You may delete your own reservations and examine any reservation. When you examine a reservation, you get the information from the user data base as well as the time that the reservation was made. When selecting a reservation to examine or delete, you need only specify any time during the reservation, not necessarily the starting time.

A status function has been provide to display a text page that can detail the status of the instrument, including scheduled down time, probe changes, etc. This will (hopefully) be updated on a regular basis.

You may also log in to the data base with the username browse instead of an instrument username. This will permit you to browse the reservations, but not make or delete reservations. This is intended primarily for the instrument-only version of the program, but it does allow anyone to examine instrument reservations.

The version of the software that runs on the terminal at the instrument is almost identical to the remote access version. The primary difference here is that you never need to select an instrument, since the system will only access the instrument that it is associated with. When you quit from this version of the system, it changes the logged in user name to browse and displays the schedule rather than permitting choice of a different instrument. You may then use the login command to login with your username to make a reservation. Be sure that when you remember to log out when you use the instrument terminal to make a reservation, otherwise a user following you can remove the reservation you just made!

Reservation pages are automatically created as they are needed. If you make the first reservation on a given day, you will initially see a screen that says simply that there is no reservation page for that day. When you press 'M' to make a reservation, a reservation page will be created and displayed.

Your login username will normally be displayed in the lower right corner while you are logged in. This will be blanked on the spectrometer systems when you quit and the system goes into the browser mode. Also, when no one is logged in on the spectrometer systems, the main menu does not display the make and delete reservation options. Attempts to make or delete a reservation in the browser mode will result in a help screen that tells you to log in with a valid user name to make a reservation.