

# CALNET

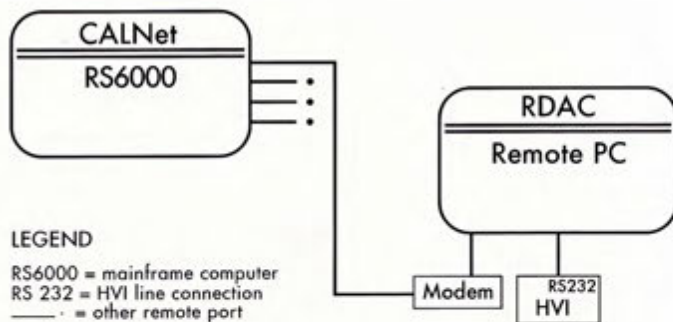
## CALIBRATION NETWORK

### Introducing CALNet

Cotton Incorporated's latest addition to its Engineered Fiber Selection™ family of programs is Calibration Network (**CALNet**). **CALNet** is a computer-based network interconnecting HVI lines and users. The intent of **CALNet** is to conduct rapid local statistical analyses of HVI data with simultaneous access to a central HVI calibration data bank. Once CALNet is fully operational, HVI calibration data will be collected from EFS™ HVI lines and participating HVI users.

### Data Collection Facility

A specifically configured computer/communications package called *Remote Data Acquisition Communications* or RDAC, has been developed by Cotton Incorporated to interface HVI lines with **CALNet**. RDAC is located at each user's HVI site and manages the collection and analyses of calibration data and automatically feeds it to the **CALNet** network by telephone (modem).



*The above flow diagram illustrates just one of many possible hardware configurations using **CALNet** in a mill or laboratory situation. HVI data can be acquired directly from HVI lines by modem or through networking personal computers.*



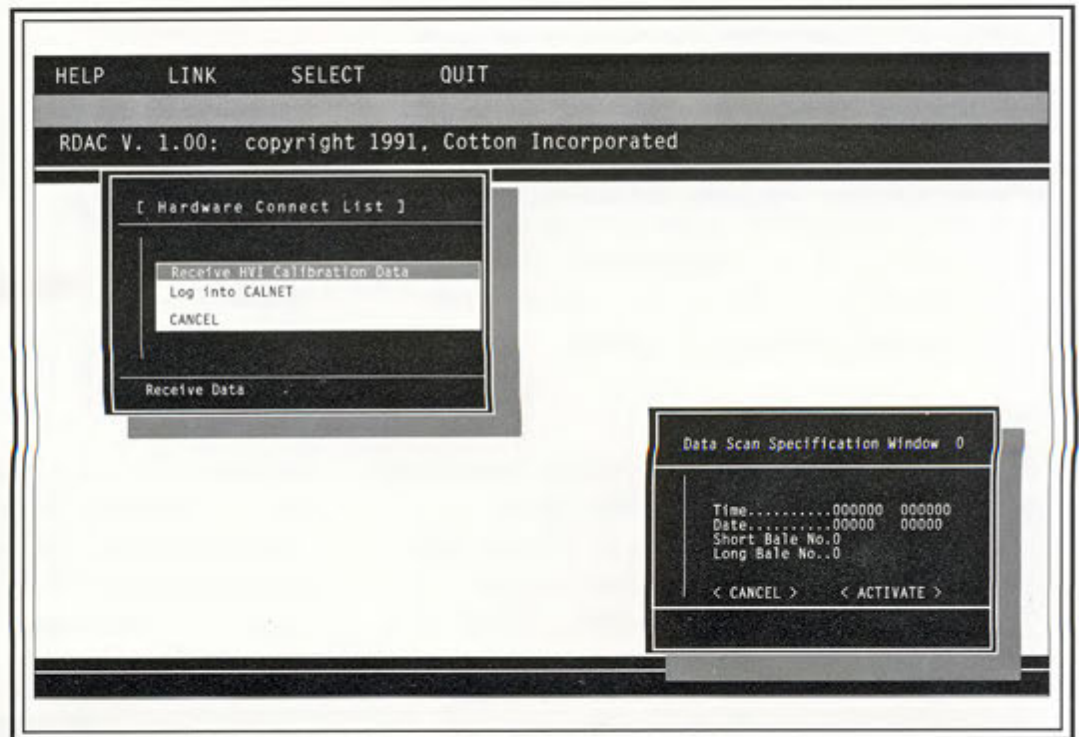
***Data collection lies at the very heart of calibration. HVI data from participating HVI users will be accessible by CALNet.***

### **How Accurate is HVI Data?**

Over the past decade, more than 550 HVI lines have been purchased worldwide. Until now, a central mechanism to examine the accuracy of HVI data did not exist. At the moment, each HVI testing site including the USDA uses its own calibration procedures. Almost all HVI owners worldwide use USDA HVI calibration standards to gauge the performance of their machines. However, despite this practice, the industry remains uncertain as to the quality of HVI data generated by labs other than their own.

The most effective way to assure HVI data accuracy is to establish a calibration network which independently examines and statistically quantifies HVI and related cotton data. Cotton Incorporated realized this need in the cotton industry; **CALNet** is the result.

*Choose LINK from the CALNet main screen to open a window which lists the ways you can connect to sources of cotton fiber data.*



cal - i - bra' - tion:

*the act or process of standardization (as of a measuring instrument) by determining the deviation from a standard so as to ascertain the proper correction factors.*

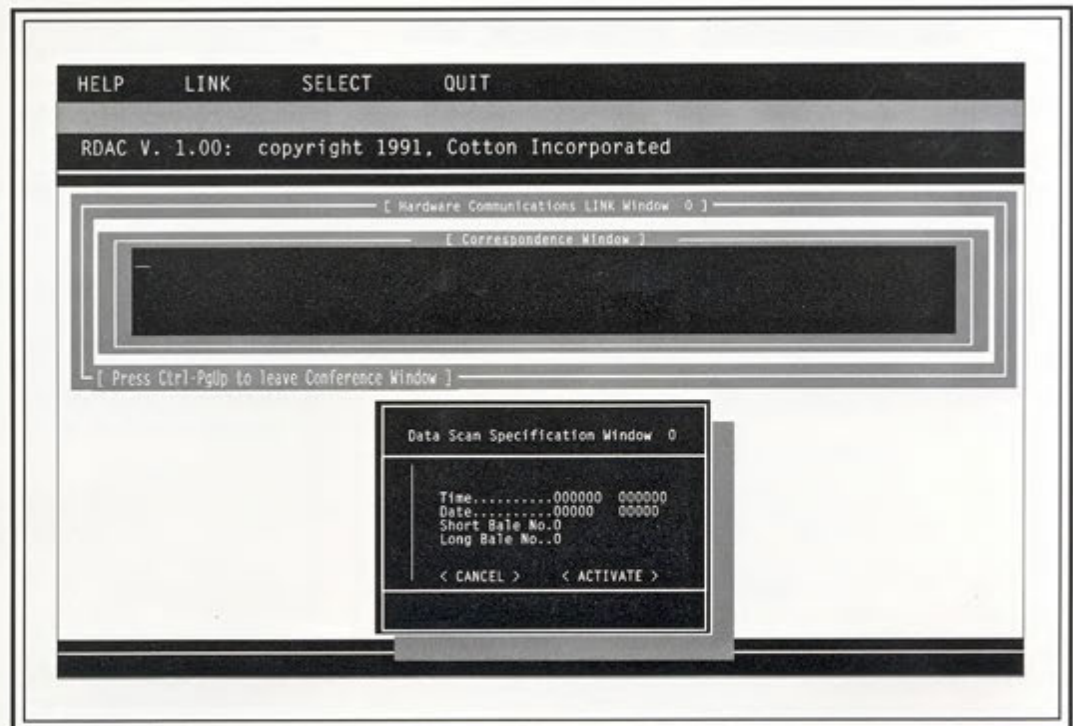
### Use of CALNet to Weed Out Factors Which Bias Cotton Measurements During Processing

Statistical and graphical analysis of HVI data as it is received can ensure stability—help weed out anomalies—which may indicate an inconsistency somewhere in the measurement system. It provides a real-time evaluation of HVI and calibration data necessary for accurately evaluating and tracking:

- *processing trends,*
- *machine or automation-produced biases,*
- *environmental fluctuations.*

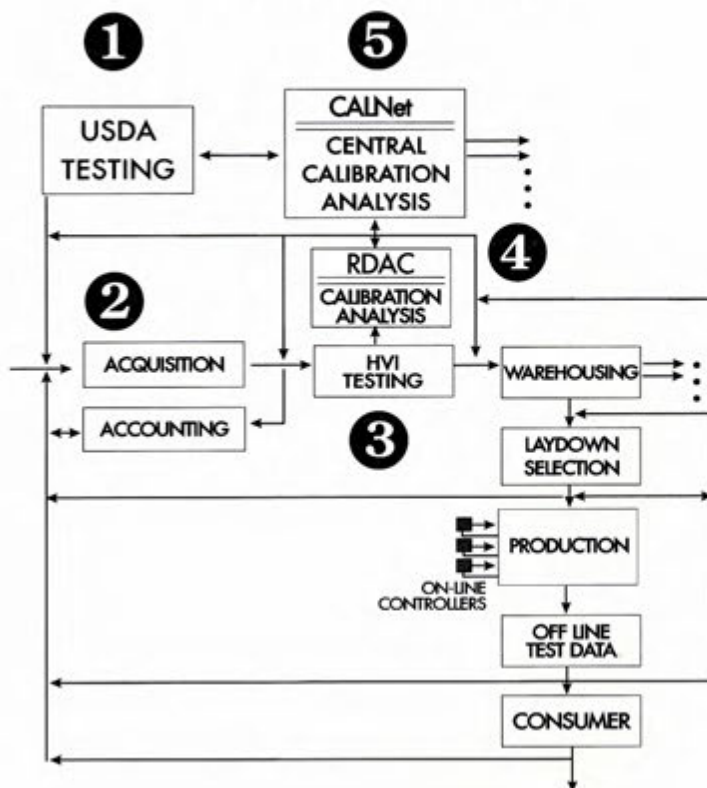
Calibration, by definition, requires that different HVI sites be able to exchange information *and agree upon its meaning and content.* The widespread use of **CALNet** will ensure the proper exchange and analysis of calibration data, and promote greater use and exchange of cotton data.

Once RDAC is linked to an HVI line or a modem, communication can be monitored using the corresponding **CALNet** window. For example, notes explaining special operating conditions can be included with a real-time calibration run.



## DATA FLOW WITHIN THE CALNet SYSTEM

Generally, cotton data moves in a continuous flow within the entire US cotton processing system. A starting point may begin with USDA testing (1) of cotton ready to be purchased (2). Property measurements may be taken from an independent or in-house HVI source (3). Using an RDAC unit (4), calibration data is locally collected and analyzed. Data from this unit and others are rapidly verified by CALNet (5).



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### HARDWARE REQUIREMENTS

#### RDAC

1. computer
  - a. XT\* model or better (IBM<sup>®</sup> 386 20MHz recommended)
  - b. 20 Meg hard disk (2Meg RAM recommended)
  - c. 3-1/2" diskette drive
  - d. color VGA monitor compatible with IBM<sup>®</sup> graphics
  - e. a minimum of two RS232 ports
  - f. parallel port (recommended)
  - g. math co-processor
  - h. MS-DOS<sup>®</sup> 3.3 or better
2. 2400 baud Hayes<sup>®</sup>-compatible modem
3. printer (Hewlett-Packard or compatible laser recommended); dot matrix okay
4. dedicated "outside" telephone line
5. Microsoft<sup>®</sup> -compatible mouse

- \* a. clock must be added  
 b. very, very slow performance  
 c. note VGA monitor requirements (and add 3-1/2" disk drive)

Cotton Incorporated is the research and promotion company of US Upland Cotton Growers. Company efforts concentrate on building demand for cotton products and cotton consumption.

Founded in 1970, Cotton Incorporated's world headquarters is in New York, with research facilities in Raleigh, North Carolina and Greenville, South Carolina. Additional offices are located in Los Angeles, Atlanta, Basel, Osaka, and Singapore.

To learn more about Cotton Incorporated's worldwide research and promotion activities, write Cotton Incorporated, 1370 Avenue of the Americas, New York, NY 10019.

Inquiries about our Engineered Fiber Selection<sup>™</sup> family of programs are welcomed and may be addressed to:

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