When you select your computer...

No other data processing system on the market can match the revolutionary Philco Transac S-2000 Computer for speed, capacity and reliability.

Here is the world's first and only large-scale all-transistor data processing system... unsurpassed in capacity or performance... a new dimension in proven computer reliability... years ahead in design... a product of Philco's long and extensive experience in solid state electronics, transistor circuit design and computer logic. Transac is meeting the modern challenge for faster, smaller and more reliable large-scale data processing systems. Philco invites you to consider the many outstanding advantages of the new Transac S-2000 before you decide on any large scale data processing system.
S-2000

handles commercial, engineering, and scientific data processing with equal facility

Production Control
Inventory Control
Premium Billing and Accounting
Sales—Order Billing
Stock Transfer
General Accounting
Revenue Accounting
Payroll
General File Maintenance

Matrix Calculations
Data Reduction
Linear Programming
Statistical Analysis
Complex Equations
Simulation—Aircraft, Missiles, Refineries, Steam Plants
Real-Time Control and Data Logging
Weapons Systems

TRANSAC S-2000 IS AVAILABLE NOW
Make this point-by-point comparison of the new PHILCO

System Flexibility
Modular design allows easy expansion of the system. Plug-in modules eliminate long periods of inoperability while a system is being expanded. Up to 65,536 words of core memory and 256 of each type of input/output unit can be incorporated in the system.

High Speed
The TRANSAC S-2000 system is 3 to 10 times faster than other commercially available EDP systems. Lowest computation cost is assured by high system speed—and more reserve time is available for additional applications.

System Balance
Concurrent operation of multiple high speed magnetic tape transports and an internal execution rate of more than 60,000 instructions per second provide an optimum balance to meet each user's computational requirements.

Physical Compactness
All-transistor construction and the use of printed wiring techniques plus the elimination of vacuum tubes result in a compact, large-scale data processing system one-fifth the size of conventional vacuum tube systems.
Minimum Installation Requirements

TRANSAC S-2000 costs less to install than any other large scale EDP system. Savings of $100,000 or more on site preparation can be realized with a TRANSAC S-2000 system.

Low Cost Operation

Low power requirements result in savings of up to $500 per month. The average TRANSAC S-2000 system requires only 15 KVA.

Ease of Maintenance


Reliability

The Philco TRANSAC S-2000 system offers longer periods of uninterrupted operation than any other computing system. Transac is the only computer with proven multi-million hour transistor reliability.

In the wonder-world of advanced electronics, look to the leader... LOOK AHEAD... and you'll choose PHILCO
Here are some facts and figures on the new Central Computer

1. Average Operations per Second (Including Memory Access)
   a) Arithmetic (Fixed Point)
      - Addition and Subtraction: 60,000
      - Multiplication: 26,000
      - Division: 17,000
   b) Comparisons: 83,000

2. Memory Capacity
   a) Basic Core Storage Unit—4,096 words (32,768 alpha numeric characters).
   b) Expandable to 65,536 words (524,288 alpha numeric characters) in units of 4,096 words.

3. Internal Characteristics—Central Computer
   a) Binary—parallel—asynchronous.
   b) Fixed point (floating point optional).
   c) Word length—48 binary digits.

4. Instruction Code
   a) Single address.
   b) Two instructions per word.
   c) 223 instructions (including 59 floating point).

5. Index Registers
   Four to sixteen in units of four.
PHILCO TRANSAC S-2000

On-Line Input/Output

1. Magnetic Tape Transports
   a) Reading/Writing Speed—90,000 characters per second.
   b) Multiple tape sequencing—allows transfer rate of 360,000 characters per second.
   c) Simultaneous Read/Write/Compute operation.
   d) Tape Dimension—3,600' length, 1" width.
   e) Reel Capacity—16 million alpha numeric characters.
   f) Density—600 characters per linear inch.
   g) Tape Speed—150 inches per second.
   h) Tape Rewind Speed—225 inches per second.
   i) Start/Stop Time—5 milliseconds.
   j) Immediate Automatic Information Verification of both Reading and Writing.
   k) One Control Unit—up to 16 tape transports.

2. Punched Card Reader
   a) 2,000 cards per minute.

3. Card Punch
   a) 100 cards per minute.

4. Paper Tape Reader (photo electric)
   a) 5, 6, 7 or 8 channel tape.
   b) 1,000 characters per second.

5. Paper Tape Punch
   a) 5, 6, 7 or 8 channel tape.
   b) 60 characters per second (240 optional).

6. Magnetic Drum
   a) Capacity—32,768 words (262,144 alpha numeric characters).
   b) Up to 32 drums allowed.

7. Electric Typewriter
   a) 10 characters per second.

Off-Line Peripheral Equipment

1. High Speed Printer
   a) Printing Rate—900 lines per minute.
   b) Characters per Line—120.
   c) Printing Characters—56.

2. Magnetic tape to punched card/punched card to magnetic tape converter
   a) Reading Speed—2,000 cards per minute.
   b) Punching Speed—100 cards per minute.
   c) Extensive Format Editing.

Installation

1. Floor Space—800 square feet.
2. Power Requirements—110 V., 60 cycle
   (average system 15 KVA).
3. Air Conditioning—average of 5 tons.
4. Floor Loading—less than 80 lbs. per square foot.
5. No special sub-flooring or heavy electric cabling required.
6. Site Preparation Cost—$5,000-$15,000.
FIRST IN TRANSISTORIZED DATA PROCESSING

A PRODUCT OF

PHILCO CORPORATION

GOVERNMENT & INDUSTRIAL DIVISION

4700 Wissahickon Avenue • Philadelphia 44, Pa.