## **Olivetti P 602 MLU System** The Surveyor's Dream

Greater accuracy, capacity, convenience, expandability, simplicity of operation from the company that originated the surveying microcomputer Olivetti offers the ideal surveying system for your office. One that can take your basic field information—starting bearing and coordinates, distances, angles (included or deflected)—then let you sit back and watch the latitudes, departures, and their sums, identified by course, print clearly and quietly on paper.

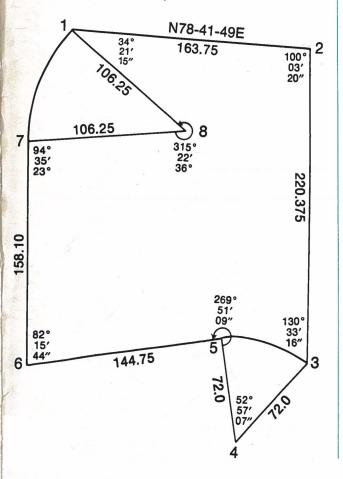
Even better, the Olivetti Surveying System will continue computing unattended, summing and printing total error of closure, total length, and the proportionate error. If the error's acceptable (you determine that!), the system proceeds to balance the traverse, printing corrected bearings, distances, latitudes, departures, final coordinates, and the area. All without a single re-entry... and the final coordinates are stored and readily available for inversing, side-shots, transformation, and any other use.

Back in 1965 Olivetti introduced the Programma 101. Since that time it has become the most widely used surveying Microcomputer in the world. The P602 MLU System is a result of the experience gained in solving surveyor's computing problems and the utilization of valuable suggestions from surveyor's and civil engineers.



**Capacity**—to handle 400 sides without re-entry. The MLU 600, an information storage unit utilizing advancements in magnetic tape technology, can store and retrieve data under program control without slowing down the operator. Tapes can be removed intact, so that rush, small jobs can be run without disturbing the progress of larger ones.

Once field information—starting bearing and coordinates, distances and angles—are entered, the P602 MLU System completes the entire traverse and its area, with all supporting data, adjustments and balances, without a single re-entry. This is accomplished under the continuous control of the operator allowing him to verify the figures at each stage, rather than having to wait until the work is complete.



To bring up a desired segment of the tape for additional work requires only the identification of the segment sought; because of random access search time, previous figures for review, correction, or change are almost instantly retrieved.

**Expandability**—LN20 Punch Tape Reader allows data or instructions previously recorded on punched tape to be fed into the computer.

PN20 Tape Punch provides a punched paper tape for off-line data storage.

XY Plotter—connects to the P602 for the simultaneous production of graphs and numeric data. Creates a picture of the calculations—can make out a rough map or recompute an old survey.

Accuracy-to meet the most demanding State and Federal requirements.

**Speed**—to increase your profits and enhance your reputation.

**Simplicity**—the P602 simplified keyboard, designed after analysis of time and motion studies, is logically grouped, color coded, and highly efficient.

In program mode it's even simpler to use. Drop in a program card, touch a button, and enter your data. That's all.

Anyone can learn to operate the P602 in a few minutes and to program it in a few days.

**Reliability** – Olivetti maintains a staff of expert programmers, fully conversant with surveying and civil engineering operations, needs and systems. They can recommend standard, off-the-shelf programs, or help in tailoring custom programs to meet specific applications. Olivetti offers sales and service offices and representation in every county in the United States. Olivetti is the orginator and foremost developer of software for almost every possible surveying application. The following is a representative listing:

- traverse closure from field data
- traverse area
- open-end traverse
- three dimensional traverse
- azimuth to bearing and vice-versa
- field angles to bearings or azimuths
- angle addition and error correction
- subtraction, multiplication, division of angles
- least squares (Crandall's Rule) balance
- Compass Rule balance
- tape correction
- coordinate geometry
- forced closure
- inverse, holding coordinates
- Iaw of sines
- Iaw of cosines
- intersection problems
- curve data
- circular curves
- three point problems
- offsets
- center of a circle
- stadia reduction
- inverse trig
- cross product and area
- profile.
- cut and fill.

... and many others in surveying, hydraulics, and general civil engineering.

