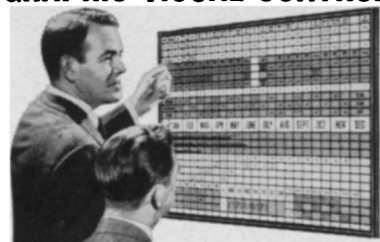


**GRAPHIC VISUAL CONTROL**



**You Get Things Done Better And Faster**

The **BOARDMASTER** saves time, cuts costs and prevents errors. You see what is happening. Shows facts at eye level. For Production, Scheduling, Inventory, Sales, Traffic, Etc. Simple to operate. Write on cards, post on board. Fully flexible. Million in use. Price \$49.50 with cards.

**FREE** 24 Page BOOKLET No. V-10 Mailed Without Obligation

**GRAPHIC SYSTEMS, Box 398, Yanceyville, N.C.**

**MEET THE HEAVENS!**

**LUNAR MAP:** 10" chart in 2 colors identifies 326 mountains, seas, craters. 25 cents  
**POPULAR STAR ATLAS:** All stars to magnitude 5½ charted in book form. \$2.50  
 Write for new free catalogue N. Dept. SNP Cambridge, Mass. 02138

**GIANT 10 Ft. BALLOONS**

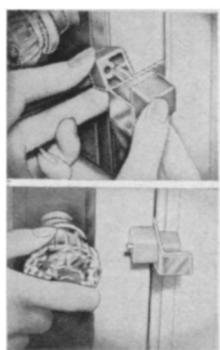
**\$2.00** Guaranteed brand - new Gov't. surplus. Durable heavy-duty Neoprene rubber. Easily inflated with vacuum cleaner, auto air hose or fill with locally available Helium. Fly adv. signs high in sky. Visible for miles—terrific for attracting crowds to Sales, Fairs, Roadside Stands, Sports, Gas Stations, etc. 2' beach-ball size, 5 for \$1 -- 4' size, 2 for \$1 -- 10' size, \$2 -- 16' size, \$5 -- 28' size, only \$10. Sorry, no COD's.

**NOVEL PRODUCTS CORP.** 31 Second Ave., Dept. 221 New York, N.Y. 10003

**How to MAKE MONEY WRITING .. short paragraphs!**

You don't have to be a trained author to make money writing. Hundreds now making money every day on short paragraphs. I tell you what to write, where and how to sell; and supply big list of editors who buy from beginners. Many small checks can add up to worthwhile money. No tedious study. Learn how to write to sell, right away. Facts free, write **BENSON BARRETT**, Dept. 163-U2, 6216 N. Clark St., Chicago, Illinois 60626

**KEYLESS PORTABLE DOOR LOCK**



**"NITELOC" Brings Instant Protection**  
 Wherever you go, "Nite-loc" brings instant protection with you. This keyless lock securely fastens to any hinged door; your home, hotel or motel door. Works from the inside so that even a pass-key can't open it. Goes on or off in a minute without any installation problems (no tools needed). Gives real security against intruders. This tamper-proof portable steel device is pocket size and light weight. Ideal for people who travel or who are alone much of the time. Slips into pocket, purse or suitcase. \$1.79 each ppd. 2 for \$3.49 ppd.

Send check or M.O. No C.O.D.'s. Satisfaction Guaranteed.  
**J. W. HOLST** Dept. SN76, 106 Emery St. East Tawas, Michigan 48730

**Lines: Hot, Cold, Tepid**

**THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890.**

These were the first words carried by the Hot Line between the United States and the Soviet Union when it was installed in 1963. President Kennedy had been a staunch supporter of the link ever since the previous October, when he was angered by the slowness of critical communications during the Cuban missile crisis.

On August 30 the Hot Line will be four years old. It has been used for its intended purpose only once, when it carried mutual reassurance last month that the Big Two would not come to a showdown in the Middle East. Otherwise, the Hot Line has borne nothing more dramatic than test messages and occasional holiday greetings.

The Line is actually two links—a cable from the Pentagon to Moscow via London, Copenhagen, Stockholm and Helsinki; and a backup radio link through Tangiers. Though it is vital, it is not unique.

Two other lines—for scientific exchange—connect the U.S. with the U.S.S.R. and carry much more daily information.

In Suitland, Md., is the U.S. end of the "Cold Line," a facsimile link that exchanges cloud photos and data from weather satellites under a mutual agreement with the Soviet Union. Some officials at the Environmental Science Services Administration think the results are less than mutual. ESSA sends data and pictures from its four operational satellites for several hours daily. The Soviet offering, sent from the Hydrometeorological Institute in Moscow, has consisted of: one week's coverage from Cosmos 122; "quite a lot of data" from Cosmos 144 until the Russians mysteriously stopped sending it June 21, and a declining trickle from Cosmos 156.

The original Hot Line was designed solely to make communication between the U.S. and Soviet Union as rapid as possible. The same intent holds for the Cold Line, but the processing of satellite information causes a presently unavoidable delay of several hours. Though the bilateral agreement calls for data to be sent no more than six hours late, neither Russia nor the U.S. has been able to meet the deadline.

ESSA officials would like to expand the Cold Line's daily helping of data in the future to include information

from a pair of satellites—one from each country—placed in orbit on opposite sides of the earth. A full exchange of data from such satellites could go a long way towards enabling worldwide use of worldwide information gathering.

The original U.S.-Soviet link includes half a dozen other countries as well. The U.S. end is located at Ft. Belvoir, Va., where a teletype machine was installed a decade ago to carry warnings about the sun's effects on radio communications over the Atlantic. Since 1957 the system has expanded until today it handles twice-daily reports on solar activity from the U.S., Russia, Germany, Holland, Japan, Australia and France.

The same group of countries, plus England and minus Holland and France, uses the teletype network as a satellite information system. Whenever a new man-made object appears in the sky, the network members are notified over the system by the U.S., although, in order not to reveal the sophistication of U.S. tracking techniques, the announcements do not include any orbital or launch data.

Of the hundreds of satellites now in orbit, there are about 30—all American—that can be of use to any country over which they are passing, if the country knows when and where the satellite will appear. Advanced orbital predictions for these satellites are sent by teletype to the network members, including Russia. This group of satellites includes weather satellites equipped with Automatic Picture Transmission systems that enable anyone with the proper ground equipment to receive cloud photos taken from almost directly over his head.

Such orbital predictions are not provided by the Soviet Union, however, which is in keeping with Russia's secretiveness regarding most of its space activities, according to officials at the U.S. end of the net, called the Telecommunications and Space Disturbances Services Center.

There are a number of scientific ties with the Soviet Union that use no cables at all, but are in the form of agreements for exchange of technical information or personnel. The Atomic Energy Commission is involved in most of them, in fields that include desalination of seawater, disposal of radioactive wastes, radioneurological research and controlled thermonuclear reactions.