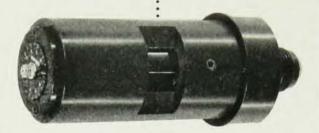
1500 RPS



ROTATING PRISM LASER Q SPOILER

Model 402 Laser Q Spoiler will Q spoil laser beams up to $\frac{5}{8}$ " in diameter. Rotating at speeds up to 1500 rps it can produce pulse durations as short as 50 nanoseconds with peak output power in the megawatt range, depending on laser system characteristics.

To obtain shortest possible shuttering times and also eliminate critical alignment problems, Model 402 employs a total internal reflection prism rotated on an axis parallel to the prism hypotenuse and perpendicular to the roof edge.

The prism is rotated by a compact turbine which will operate from either a small compressed air supply or bottled nitrogen.

Model 402 Laser Q Spoiler measures $1\frac{1}{2}$ " in diameter by $4\frac{7}{8}$ " long and can be mounted and operated in any position. Laser Q Spoilers in other sizes and speeds, powered by either compressed air or electric motor, can be made to special order.

Model 402 Laser Q Spoiler: \$1500. For information contact Field Sales and Service.



WE HEAR THAT

Morton Hamermesh has been appointed associate director of the Argonne National Laboratory, Argonne, Ill. He was previously director of the Laboratory's Physics Division.

W. Lewis Hyde, director of development for the American Optical Company's J. W. Fecker Division, will become professor of optics at the Institute of Optics of the University of Rochester College of Engineering on July 1. Dr. Hyde, who has served as chairman of the US delegation of the International Commission for Optics since 1960, was recently elected international vice president of the Commission.

L. R. Bickford, Jr., has been named director of general science at IBM's Thomas J. Watson Research Center in Yorktown Hts., N. Y. Prior to his new appointment he served as manager of IBM's Magnetics Department.

Howard S. Coleman has been named to head the physics research activities of Melpar Inc. in Washington, D. C. He was formerly vice president in charge of research and engineering at Bausch & Lomb.

Dwain B. Bowen has joined the staff of Electro-Optical Systems, Inc., in Pasadena, Calif., as manager of laser applications in the Quantum Physics Division. Dr. Bowen was previously a staff scientist with Autonetics, a division of North American Aviation.

Recent additions to the staff of the Union Carbide Corporation's Y-12 plant at Oak Ridge, Tenn., are Robert A. Hobbs, John A. Oustalet, Jr., and John P. Moore. New staff members at Oak Ridge National Laboratory, which is also operated by Union Carbide, include Cloyd O. Beasley, Jr., and Derek Walton. John H. Neiler has left ORNL after nine years of service to become vice president and technical director of the Oak Ridge Technical Enterprises Corporation.

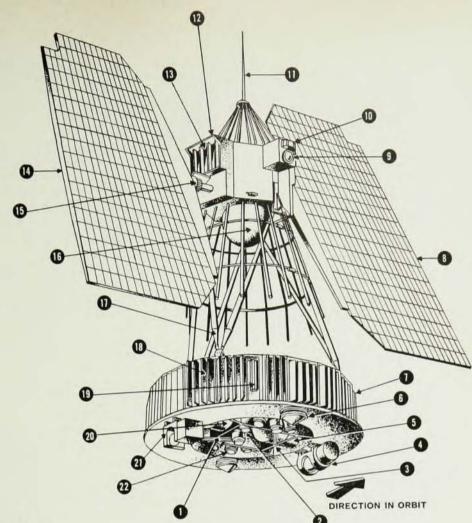
John E. Merrill has been appointed principal scientist at the Franklin Institute Laboratories in Philadelphia, where for the past four years he has been a senior staff engineer. Dr. Merrill is currently serving as visiting professor of astronomy at the University of Pennsylvania.

Tarani Chandra Bhadra, formerly at UCLA as a postdoctoral exchange fellow from India, has joined Electro-Optical Systems, Inc., in Pasadena, Calif., as a physicist in the firm's Quantum Physics Division.

Walter Williams, formerly supervisor of thermal coatings for Swedlow Inc., has been named division manager of Dyna-Therm Chemical Corporation's Thermal Space Division in Los Angeles.

Richard W. Damon has joined the staff of the Sperry Rand Research Center in Sudbury, Mass., where he is in charge of a research program on the microwave properties of solids.

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- 2. Automatic Picture Transmission Camera
- 3. Medium Resolution Infrared Antenna
- 4. Medium Resolution Infrared Radiometer
- 5. TV Recorder
- 6. S-Band Antenna
- 7. Sensory Ring
- 8. Solar Paddle
- 9. Horizon Scanner
- 10. Coarse Sun Sensor
- 11. Command Antenna
- 12. Stabilization and Control Housing
- 13. Thermal Control Shutters
- 14. Solar Paddle
- 15. Solar Paddle Sun Sensor
- 16. Pneumatic Tank
- 17. Interconnecting Truss
- 18. Thermal Control Shutters
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NIMBUS' polar orbit will place the satellite over every spot on Earth at approximately noon, local time, each day. APTS—one of four meteorological information gathering systems included in NIMBUS—will permit meteorologists of all nations to obtain local area cloud pictures with inexpensive ground equipment. Usable immediately for weather analysis and forecasting, the pictures will encompass a 1,000,000-square-mile area and will be transmitted continuously as a "narrow-band" TV signal at 136 mc. They will be reproduced, line by line, on a specially adapted facsimile machine. The only other ground equipments needed are a helical antenna, pedestal, and preamplifier (see small picture) and the receiver feeding the facsimile machine. Total cost for a complete ground station will be \$30-40,000.

More accurate weather analyses and forecasts are of inestimable value to the economies and people of every nation . . . a leading technical journal has predicted that success of the APTS experiments alone "will probably

bring more daily benefits to more people than any other project in the world's space program." The U.S. Weather Bureau is cooperating with NASA in the NIMBUS program, for which NASA's Goddard Space Flight Center is prime contractor.

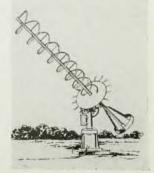
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Nicholas Glyptis, consulting physicist and formerly president of Multi-Tron Laboratory, Inc., Chicago, Ill., has been named to head the new advanced research and development laboratories of Wen Products, Inc., also in Chicago.

M. W. Welch, president of the Welch Scientific Co., Chicago, has been elected president of the recently established International Union for Vacuum Science Technology Applications. The Union is the successor to the former International Organization for Vacuum Science and Technology.

Eugene V. Ivash and William C. Duesterhoeft, Jr., of the University of Texas, have been awarded the first research fellowships under a new visiting professor program established by the Texas Atomic Energy Research Foundation and the General Atomic Division of General Dynamics Corporation. They are spending several months at General Atomic's laboratories in San Diego, Calif., as participants in the controlled-fusion program sponsored jointly by General Atomic and the Foundation.

Willard F. Libby, director of the Institute of Geophysics and Planetary Physics of the University of California, has been elected to the board of directors of the Douglas Aircraft Company. He is also a member of the Douglas Scientific Directorate.

James J. Brophy has been promoted from director of technical development to the post of vice president for technical development at the Armour Research Foundation of the Illinois Institute of Technology in Chicago.

Joyce J. Kaufman, a member of the theoretical chemical physics group at the Research Institute for Advanced Study, returned recently from a seven-month assignment in Paris as a visiting member of the Centre de Mécanique Ondulatoire Appliquée. While abroad, Dr. Kaufman lectured at several universities in England, including Oxford, Cambridge, Sheffield, Manchester, and King's College, Newcastle-upon-Tyne.

George Dousmanis, research physicist at RCA's Electronics Research Laboratory in Princeton, was honored in January by King Paul of Greece with the award of the Golden Cross of the Company of King George I. Dr. Dousmanis recently spent several months in Greece conducting research and lecturing on atomic physics at "Democritus", the new nuclear research center in Athens.

Randolph-Macon College of Ashland, Va., has announced the appointment of Sanford P. Thompson as professor of physics. Dr. Thompson, a theoretical physicist, has been a member of the applied mathematics staff at the Naval Research Laboratory in Washington, D. C.

Simon H. Bauer is on sabbatical leave from Cornell University during the current academic year as an NSF senior postdoctoral fellow. He spent four months with the Canadian National Research Council's Division of Pure Physics, and is now at the Weizmann Institute.