



Alpine

*Mass-producing FPC: Some progress.*

be highly competitive with other proteins. The price might go down further as capital investments are amortized, says Finch. The product would also no longer have the stigma—even though it is more illusory than real—of including the viscera.

A possible major spur to development may be the Nixon Administration's commitment to provide an adequate diet for every school child in the United States. Because the Federal Government must bear most of the cost of feeding the needy children and because 70 cents of every dollar spent for a school meal goes to pay for the protein in it, the cheap FPC may become more and more attractive.

Finch agrees that a major problem has been and will be public acceptance of fish protein products. The Swedish project may show the way. An important step might be an FDA waiver on the one-pound-package requirement so that FPC could be used in school meal programs. And industry continues to be interested; although Alpine is still the only United States producer, Cardinal Proteins, Inc., expects to be on stream with a 200-ton daily capacity plant in Nova Scotia soon. □

## GUN DETECTOR

### Searching for weapons

Last Oct. 15 Transportation Secretary John A. Volpe dramatically announced to the press that, following many months of tests, an anti-hijacking system developed by the Federal Aviation Administration had gone into operational airline use at key locations in the United States.

The so-called system he referred to consisted of a \$600 off-the-shelf magnetometer built by Infinetics, Inc., Wilmington, Del., modified by research engineers in the FAA, and a kind of

check list of behavioral traits considered by psychologists to be common or peculiar to potential hijackers. The instrument senses disturbances in the earth's magnetic flux caused by ferrous-metal masses in proximity to the device.

Since the announcement, only four airlines have acquired and installed the weapon detector: Continental, Eastern, Pan American and Trans World Airlines. The reluctance of the airlines to use the device stems not from its ability to detect weapons but from its intolerable propensity for false alarms. The trouble, says one airline representative, is that it detects too much, including the wires and stays in female undergarments. FAA field trials showed about a 50 percent false-alarm rate; users report it runs as high as 87 percent.

The recent rash of hijackings in the Middle East has spurred new efforts to develop weapons detectors. Tested without fanfare at Dallas' Love Field last week, with FAA observers present, was a new magnetometer-type detector that appears to offer better discrimination than the Infinetics device. The system, built by SPS, Inc., a three-month-old Garland, Tex., electronics manufacturer, reportedly produced a false-alarm rate below 40 percent.

Like previous developers of similar systems, SPS officials are reluctant to reveal design details. Tom I. Allen, consultant to the SPS president, says the WD-100 will detect items of a specified minimum mass containing gun metal, and claims: "There is no practical method for covering or concealing a weapon to prevent triggering the alarm."

Some cameras and all portable radios (because of the speaker magnet) will cause a false alarm, he admits, but few other items normally carried on the person will trigger the system. There are some modern guns assembled largely of nonferrous metals, says Allen, but even these are readily detectable because they must contain gun metal for the chamber, barrel and firing pin.

The \$1,000 system (plus installation) can be located anywhere and the sensors may even be buried in concrete for invisibility, Allen says. Coverage is spherical to at least a 10-foot radius.

He also emphasizes that during its installation the effects of nearby ferrous metals can be effectively nulled out. For example, Allen says that a WD-100 has just been installed by SPS in the Garland Post Office to detect parcels with potentially dangerous contents. There, the detector is mounted 22 inches above a steel table overlooking a steel conveyor belt, yet it is able to detect gun metal in any package passing beneath.

Although not yet in production, the firm expects early sales to airports and airlines, post offices and banks. □

## SCIENCE NEWSBRIEFS

### Geneva Protocol

At its meeting in Chicago last week the American Chemical Society reversed its 45-year-old stand opposing United States approval of the Geneva Protocol outlawing chemical and biological weapons. In 1925, when the protocol was formulated, the society had opposed it on the ground "that nonlethal but temporarily incapacitating chemicals could make warfare more humane than it had been." That reasoning no longer convinces the society's Board of Directors and Council, who have now sent a resolution to the Senate Foreign Relations Committee urging ratification of the protocol. In asking the Senate to ratify the protocol last month (SN: 8/29, p. 166), President Nixon emphasized that in the United States' interpretation the protocol did not prohibit the use of riot-control agents. □

### Medical devices

Last December the Secretary of Health, Education and Welfare appointed a task force to study the problems surrounding the increasing number of medical devices being introduced for diagnosis and treatment, some of which have been found unsafe and ineffective (SN: 5/23, p. 500).

In a just-published report, the committee recommends new legislation to vest control of such devices in the Secretary of HEW. This would mean the creation of a new regulatory facility like that now represented by the Food and Drug Administration. The committee also asked for an immediate start on review of the estimated 5,000 devices now in use. This would be done by organizing a group of experts and might take two years, according to the task force chairman, Dr. Theodore Cooper, director of the National Heart and Lung Institute. □

### Auto pollution

By a vote of 73-0, the Senate this week passed Sen. Edmund Muskie's (D-Me.) bill requiring that new cars built after Jan. 1, 1975, emit 90 percent fewer pollutants than permitted for 1970 models (SN: 8/29, p. 163).

The bill now goes to conference with a less stringent House-passed bill. It is expected to face a stiff challenge. The Automobile Manufacturers Association claims the legislative deadline is unacceptable.

The legislation also includes wide-ranging provisions to set national air-quality standards, require all major industrial plants to install the best pollution-control equipment available and permit citizens' suits (see p. 273) to force compliance with standards. □