aircraft in service this month. Heralds have, to date, logged more than two million miles in passenger-carrying service on Canadian and European routes.

### More bouquets for CL-44

Following Flying Tiger's recent endorsement of the winning ways of the Canadair CL-44D swing-tail freighter, Richard M. Jackson, president of Seaboard World Airlines, has reported a boost in revenues resulting from the first full year of operations with his company's Canadair freighter fleet. He said revenues were \$23 million last year, compared with \$20.9 million in 1961, and more significant: they made \$900,000 profit in '62, compared with a loss of \$4.7 million in '61.

# SunAir transceiver weight

The weight of SunAir Electronics' SA-14 HF transceiver was reported incorrectly in the product news section of the January issue. The unit, complete with power supply/modulator, weighs only 12 lb, not 25 lb as stated.

Change of name of Carriere and MacFeeters Ltd., to Carriere Technical Industries Ltd., is announced. Headquarters of the company remains at 936 Warden Ave., Scarborough, and R. J. Carriere continues as president, with G. J. Carriere as vice-president; C. D. Parmelee as general sales manager; and Ron Carriere as works manager. William A. Beech was last month appointed company's Ottawa representative, based at 919 Glasgow St.

### Hawker Siddeley profit

In a letter to shareholders of Hawker Siddeley Canada Ltd., president T. J. Emmert reports that the company anticipates a "modest profit" to be shown for 1962 when accounts are completed in April. Stemming of loss situations at Canadian Car, Montreal, and Avro Aircraft, Malton, Ont., were cited as factors in the recovery. The sale of Avro Aircraft and Canadian Applied Research divisions to de Havilland for \$13,590,971 greatly improved the working capital position of the company. Sale of Orenda industrial gas turbines in the U.S., following activation of the Orenda Inc. sales engineering organization in Chicago, was reported encouraging.

## U.S. order for Garrett

Follow-on order for \$250,000 worth of magnetic amplifiers and reactors has been given Garrett Manufacturing Ltd., Rexdale, Ont., by the electronics division of Avco Corp., Cincinnati, Ohio. These will be used in radars of the North American defense system.

### Northrop fuel cells order

Dominion Rubber Co., Kitchener, Ont., received an additional \$529,000 order for fuel cells for Northrop F-5 jet fighters and T-38 Talon jet trainers. This increases Dominion Rubber's par-



**T-38 Talon trainer** 

ticipation in these aircraft programs to more than \$1,300,000. The F-5 is being produced by Northrop for the U.S. mutual security program and is expected to be one of the States' biggest military aircraft production programs. It is designed to replace the F-84 and F-86.

# **Defence** contracts

# \$10 million copter contract

Largest defence contract awarded in a recent four-week period went to Canadian Pratt and Whitney Aircraft Co. Ltd., Jacques Cartier, Que, for \$10,876,002 worth of Sikorsky HSS-2 helicopters, and tooling and test equipment for assembly of helicopters. (See page 20.)

Other contracts included: Litton Systems (Canada) Ltd., Rexdale, Ont., maintenance spares (\$2,255,228); Aircraft Appliances and Equipment Ltd., Rexdale, Ont., oil filters (\$112,026); Aviation Electric Ltd., Montreal, Que., wheel and brake assemblies (\$309,807), actuator assemblies (\$45,313), night irradiance meter (\$17,835) engineering orders (\$11,860), aircraft spares (\$41,-590); Aviquipo of Canada Ltd., Montreal, Que., aircraft hydraulic equipment (\$14,138); Brian Engineering Ltd., transmitters and compasses (\$51,459); Canadair Ltd., Montreal, Que., airframe spares (\$214,742), stabilizer modification (\$45,-248), seat spares (\$16,055), Canadian General Electric Co. Ltd., Toronto, Ont., aircraft instruments (\$12,434); Central Dynamics Ltd., Pointe Claire, Que., aircraft spares (\$37,541); Computing Devices of Canada Ltd., Ottawa, Ont., engineering orders (\$29,334); DeHavilland Aircraft of Canada Ltd., Malton, Ont., fuel tanks (\$685,308), tip tanks (\$53,326), gear assemblies (\$11,998); Dowty Equipment of Canada Ltd., Ajax, Ont., airframe spares (\$14,322); Emisco Ltd., Ottawa, Ont., headset/microphone assemblies (\$26,286); Field Aviation Co. Ltd., Malton, Ont., electronic test benches (\$11,904), liferafts (\$456,272), immersion suits (\$25,195); Garrett Mfg. Ltd., transducer modules (\$193,070), aircraft electrical equipment (\$15,317), transducers, amplifiers, valves, 604); B. F. Goodrich Canada Ltd., Kitchener, Ont., aircraft wheels (\$12,-052); Goodyear Tire & Rubber Co. of Canada Ltd., New Toronto, Ont., aircraft wheels assemblies (\$34,020); T. W. Hand Fireworks Co. Ltd., Cooksville, Ont., smoke and illumination signals (\$614,348); Imperial Oil Ltd., Ottawa,

Ont., aviation gasoline (\$25,064); Hawker Siddeley Canada Ltd., Canadian Car Division, Fort William, Ont., aircraft spares (\$11,354); Leigh Instruments Ltd., Carleton Place, Ont., aircraft navigational equipment (\$133,004); Leonard Electric Ltd., Port Credit, Ont., aircraft lamps (\$15,096); Northwest Industries Ltd., Edmonton, Alta., airframe spares (\$13,045); Patlon Aircraft of Canada Ltd., Toronto, Ont., switches (\$18,791); Sparton of Canada Ltd., London, Ont., sonobuoy transmitters (\$761,000): Sperry Gyroscope Co. of Canada Ltd., Montreal, Que., gyro compasses (\$293,706), aircraft navigational equipment (\$288,981), spare parts (\$35,591).

# **Transport**

# Carriers gaining ground

Dominion Bureau of Statistics figures show that Canadian airlines in August and the first eight months of 1962 showed larger gains in operating revenues than in expenses.

Revenue passengers in August rose 5.8 per cent to 532,687 from 503,680 in the same month of 1961. Revenue cargo increased 12.7 per cent to 27,013,365 pounds from 23,959,531.

For the second consecutive month, operating revenues reached a new all-time high, increasing 14.7 per cent to \$31,490,158 from \$27,462,828 a year earlier. Operating expenses rose 8.1 per cent to \$25,426,230 from \$23,526,700.

As a result, operating income in August advanced to \$6,063,928 from \$3,936,128 a year earlier and net income, after provision for income taxes and other charges, increased to \$5,063,779 from \$2,870,345.

In the period January to August, the number of revenue passengers rose 10.9 per cent to 3,620,073 from 3,264,463, while revenue cargo increased 11 per cent to 170,955,517 pounds from 153,956,273. Operating revenues advanced 12 per cent to \$193,965,695 from \$173,198,373 and operating expenses rose 7.6 per cent to \$185,779,621 from \$172,717,923

#### TCA buys fifth Jet Trader

Purchase of a fifth DC-8F Jet Trader convertible cargo-passenger transport has been announced by TCA. Purchase price, including equipment for conversion from cargo to passenger configuration, was about \$7 million, with delivery set for April, 1964. Powered by Pratt & Whitney turbo fan engines, the five Jet Traders will augment TCA's fleet of 11 Series 40 Rolls-Royce jet-powered DC-8 passenger transports.

TCA's latest purchase is the 11th Jet Trader order since the aircraft design was introduced in April, 1961. Other airlines in the order book are Capitol Airways, The Flying Tiger Line, Trans-Caribbean Airways and Trans-International Airlines.

Over 200 DC-8 Jetliners have been ordered to date. Orders for 10 of the