

voluntary participation of pilots flying under visual flight rules. They will have to contact the terminal air traffic control unit before entering the terminal control area, and then will be given directions as needed to fit them into a safe traffic pattern. Many VFR pilots have already been following this routine for their own safety.

Longer lives for Grumman

Propellor-driven twins can achieve near-STOL performance with a new inverted slotted flap, says McKinnon Enterprises, of Sandy, Ore. On a Beechcraft 18, the inverted flap gives a power-on stalling speed of 39 mph when flaps are lowered 90 deg. Landing and take-off over a 50-ft barrier can be accomplished in less than 1,000 ft. The flap retracts by swinging forward 110 deg until it is flush with the wing. Retraction is said to cause no adverse buffeting or pitching.

The flap was developed by a Peruvian aircraft and sub-system manufacturer. The USAF Flight Dynamics Laboratory is installing the inverted FANSA flap on a Douglas C-47. Further development is aimed at extending the flap operating range to high-speed turbo-prop and jet aircraft.

McKinnon Enterprises have certified and delivered several Grumman Goose and Widgeon amphibians with this flap. Results have been so good that plans are being made to modernize the Mallard and Albatross in this way. With turbo-prop engines and the flap, the 665 Grumman-built amphibians will have their lives extended to 40 years, McKinnon claims.

Club builds own hangar

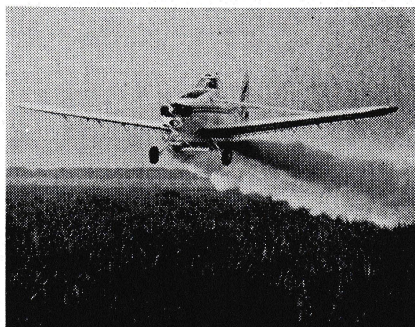
Members of the fast-growing Toronto Flying Club have just built themselves an eight-plant hangar. Wooden trusses for the structure were hoisted into place by a helicopter from Dominion Helicopters Ltd., which shares the same airfield at King City, Ont. A club member is being coached in helicopter instruction in order to release Dominion's pilots during the winter. The club already ferries parts to stranded Dominion helicopters. Plans have been made to lease a Twin Comanche to replace the Apache formerly used.

Full-time ground school

The Chinook School of Aviation, Calgary, is now conducting its ground school program on a five-day-a-week basis during the daytime. The change is aimed at farmers and out-of-town students who found it difficult to attend the school's evening and Sunday morning classes. The private pilot's ground school course costs \$20.

Pawnee gets a power boost

The Piper Pawnee C, widely used as a duster and sprayer, is now available with a 260-hp Lycoming, as well as the standard 235-hp engine. A controllable pitch propeller is also offered with the more powerful engine. With asbestos-covered oil lines and electrical wiring, high temperature shielded ignition sys-



More powerful Pawnee.

tem and new 13-vane oil radiators, both engines are equipped to operate in hot climates. To switch from dusting to spraying or back takes less than five minutes, the company claims. Hopper capacity is 1,200 lb or 150 gal of liquid. Safety features include a rubber-lined, burst-resistant fuel tank and a safety capsule cockpit.

Commercial glider school

A commercial glider school will open at Tottenham, Ont. in the spring. Pioneer Soaring Ltd. will offer training for beginners on conversion courses for power-plane pilots, from a 1,500-ft strip. Present equipment consists of a single-seat Brieglib Bg-12 and a Schweizer 2-22, but a Schweizer 2-33 and 1-26 are on order. A Stinson L-5 Sentinel has been imported from the U.S. as a tow-plane. The war-surplus L-5 is rare in Canada, but is well suited to tug work. The course will consist of a maximum of 45 flights and a minimum of 10 hours' flying, at a cost of \$350. For power pilots, a \$175 transition course will be offered, involving at least five hours' flying and a maximum of 30 flights.

New aircraft

20 tons straight up

The Dornier 31 E3, a 20-ton jet transport, has made the first vertical take-off for a plane of its type. The feat took place at the Dornier works airfield near Munich. The experimental



Dornier VTOL transport.

aircraft sustained a lengthy period of hover flight before landing vertically. Dornier Werke, the German manufacturer, is developing the airplane for the German Ministry of Defense.

Series 40 DC-9 flies

The latest and largest model of Douglas Aircraft's DC-9 twinjet transport, the Series 40 version, flew for the first time last month. It was aloft 4 hrs, 12 min. and reached 30,000 ft and speeds up to 555 mph. With a cabin slightly more than six ft longer than that of the preceding Series 30 version, the new model will accommodate up to 125 passengers in an all-economy seating arrangement. Its wings are identical to those of the Series 30, but its Pratt & Whitney JT8D-9 engines each produce 500 lb more thrust than the engines on earlier DC-9s.

Airbus flying costs low

Operating costs for the short-haul A-300 European Airbus will be as low as .6 cent (U.S.) a seat mile, offering potential for low fares to passengers, says Hawker Siddeley Aviation Ltd. The 230-to-300 passenger twin-jet airliner is being designed and built by the British, French and German aircraft industries, backed by their respective governments.

Alon A-2-A improved

The new Alon A-2-A model by Alenaire Ltd., Unionville, Ont., has a family seat in the back. The configuration is the same as the A-2 model with minor modifications and improvements to add speed and performance. The nose and spinner have been restyled, and wheel fairings redesigned. The A-2-A weighs only 13 lb. more empty weight than the A-2.

French light planes

The French-built Rallye light plane is to be marketed in Canada by Allied Aero Industries Inc., Pottstown, Pa. Two models are planned. The Rallye Club will be re-engined with a 125-hp Franklin and called the Waco Minerva 125. The basically similar Rallye Commodore will have its 180-hp engine replaced by a 220-hp Franklin. It will be named the Minerva 220.

Military

105 CF5s for Netherlands

The contract under which the Netherlands will buy from Canada 105 CF5 aircraft was finally signed last month. The total order is worth \$120 million. Logistics and spares support totaling \$30 million will also be provided by Canada for a period of ten years.

Canadian, U.S. and Netherlands industries are participating in the redesign and production of the CF5 to the Netherlands' requirements. Canadair Ltd., of Montreal, under license from Norair, is the prime contractor and will be responsible for final assembly and test of the aircraft, as well as for the production

of major components. Orenda Ltd., of Toronto, under license from General Electric, will produce all the engines for the Netherlands as well as for the Canadian program.

'Copter's deployment test

A Boeing CH-113A transport helicopter was split in two and packed into a C-130 Hercules recently at the Canadian Forces Base in Rivers, Manitoba. Engineers were testing the Voyageur



Helicopter airlift by C-130.

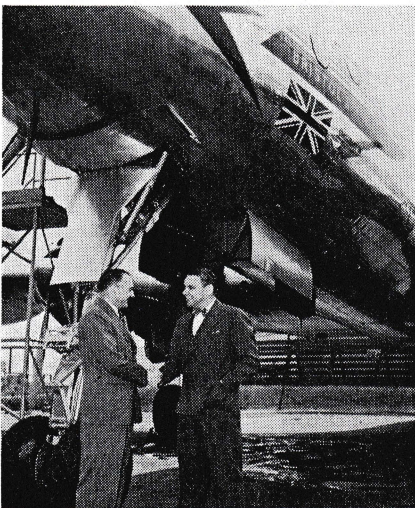
chopper for long-range air deployment. Based on results of the loading test, they estimated it would take less than a day to transport the helicopter. The complete operation would involve dismantling, loading, the flight, unloading, reassembly and flight testing.

Readers' Reaction

Letters to the editor are welcomed. They should be brief and bear the name and address of the writer, but these details will be withheld from publication on request.

Loss of an old friend

As you may have heard, one of our old friends, Carl Squier (former general manager of the Lockheed Aircraft Co.), died last month. I attach a corporate circular which I think is self explanatory and, in many ways, unique . . . "He was 74 and had been a pivotal fig-



Carl Squier (left) and Erik Nelson.

ure in the growth of Lockheed for nearly four decades.

"It was Carl who depleted his own savings and mortgaged his car and home to meet payroll demands in 1932 . . . who, believing that the Lockheed name 'is too good to die', refused to sell the Burbank plant on a piecemeal basis. It was Carl who took the late Robert E. Gross on his first tour of the factory, that led to purchase of the assets by Gross and a group of associates for \$40,000 in June, 1932. Out of that purchase came formation of the present corporation."

I also attach a picture taken in Burbank in June, 1946, when I was technical director of the Atlantic division of BOAC, and am shown accepting (from Carl) the first of six C69 Constellations, which we subsequently placed at Dorval to operate the BOAC North Atlantic Services, replacing twelve 16-seat Liberators.

But I digress from Carl Squier. He was a great man.

Erik Nelson,
Managing Director,
1 Lockheed Aircraft Corp.
of Canada Ltd.,
Ottawa 4, Ont.

People

Campbell W. Baine has been appointed manager in charge of all maintenance functions at B.C. Air Lines' Vancouver base, bases on Vancouver Island, and at upcoast points. He spent 30 years in the RCAF.

The board of directors of TransAir Ltd., Winnipeg, has appointed **F. E. Howe**, formerly vice-president, as executive vice-president; **U. S. Wagner**, general manager to vice-president of flight operations; and **T. A. Spruston**, assistant general manager of engineering and maintenance to vice-president of that division.

Bert W. Mead, of Ottawa, has become director of operations at Hoverwork Canada Ltd. He will work on the company's evaluation program in the Hudson's Bay area this winter.

Dr. Philip K. Chapman, a scientist with CAE from February, 1960 to March, 1961, has been selected for astronaut training with NASA. He has been with the Experimental Astronomy Laboratory, MIT, since leaving CAE.

Kendal Associates Ltd., of Ottawa has appointed **Charles A. Brunger** to the consulting staff. He is a graduate of McMaster University and retired recently from the RCAF as wing commander. He specializes in air traffic control systems.

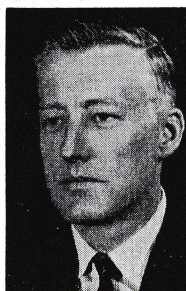
First Canadian officer elected to the slate of the Aviation Distributors and Manufacturers Association is **Vern R. Knudsen**, of Standard Aero Engines Ltd., Winnipeg. He was elected a vice-president of ADMA at the 50th semi-annual meeting last month.

Air Canada's assistant director of telecommunications, **Norman L. Stoddart**, has been awarded the annual Airline Avionics Institute's Volare Award for outstanding individual achievement in national and international airline avionics.

Rolls-Royce of Canada Ltd. has appointed **Kenneth J. Grundy** as program director. His previous post with the company was production liaison manager for North America.

Douglas H. Crosbie, until recently territory manager for central Ontario, for the Champion Spark Plug Company of Canada, Ltd., has been named national accounts representative. He succeeds **W. L. D. Muir** who retired at the end of 1967. Taking over as territory manager for central Ontario is **Robert J. H. MacMurtry**. He was formerly territory manager for Manitoba and northwestern Ontario. **George H. Barker** has been appointed territory manager for Manitoba and northwestern Ontario.

Bristol Aviation Services, a division of Bristol Aero-Industries Ltd., Montreal, has been sold to **W. S. Haggett**, who is retiring from his post as president of Bristol Aeroplane Co. of Canada Ltd. after 28 years' service. He is also resigning from the boards of Bristol Aero-Industrial Ltd., Montreal, Bristol Aerospace Ltd., Winnipeg, and Ashton Press Manufacturing Co. Ltd. The ground services company will operate under the name of General Aviation Services Ltd.



H. D. Culham



W. S. Haggett

H. Douglas Culham has been appointed assistant general manager of Canadian Flight Equipment Ltd., Trenton, Ont. He is a mechanical engineering graduate of the University of Toronto and has held positions in design, sales and quality control in the aircraft industry.

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