## NEW FASTER-THAN-SOUND JET PLANNED RADAR-AIMED

## By WILLIAM STEVENSON

A "thin-wing" version of the CF-100 twin-jet fighter has been ordered from Avro Canada for the RCAF. This high performance fighter, designated Mark V, will supplement a government order for 650 Mark IV aircraft, worth an estimated \$500,000,000, on which rocket-firing trials have just ended.

Another 70 earlier versions of the CF-100 are now in production for Canada's northern defences, but the major burden of guarding our Arctic approaches will fall on the Mark IV. Tests on this aircraft are expected to result in an operational fighter of supersonic speed, packing a radar-aimed punch of 100 rockets.

## Thrice Exceeded Sound Speed

Intensive high-speed tests have been undertaken by Jan Zurakowski, regarded as one of the world's top test pilots, who has flown the long-nosed fighter three times through the speed of

three times through the speed of sound in a series of 30 dives.

Rocket tests have been flown by a fellow Avro Canada test pilot, Peter Cope, using pressed-paper pods to house 60 rockets—30 at each wing tip. New, fibreglass pods will permit individual firing of rockets, and an extra "belly" compartment will boost capacity to 100 rockets.

Mass production of the Mark IV fighters is expected to start late this summer, though Rt. Hon. C. D. Howe, production

Hon. C. D. Howe, production minister, has warned that there may be delays while the U.S. finishes development of firecontrol apparatus. This apparatus will allow pilots to select single rockets from their positions in the pods now carried

single rockets from their posi-tions in the pods, now carried on the wing-tips.

The Mark V fighter, it was learned today, will gain higher speed from its thinner wings and may be powered in its final development by an improved version of the Orenda jet-engine.

## Needed For Arctic Defence

These developments are expected to give Canada a powerpected to give Canada a power-ful air defence along her north-ern boundaries. There has been a grave need for long-range fighters that could maintain a standing patrol in the Arctic. For this standing patrol, de-fence planners maintain the im-

fence planners maintain the important thing is to have defending fighters at high altitude, ready to intercept any enemy picked up by long-range, ground radar.

Since the best jet fighters today Since the best jet fighters today take some 10 minutes to reach 40,000-feet from a cold start (engines off), a bomber force could advance 100 miles in the interval between detection and interception — unless patrolling fighters were already available at the enemy's altitude.

The Mark IV will be supplied in quantity to defence squadrons watching Canada's back door in the Arctic.

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Eventually, the fighter's rockets will themselves be radar-guided to flying targets. Mean-while, the fighter carries a heavier load of rockets than any other yet known to be flying. Previous models bore eight 50-celling machine guns, even then calibre machine guns, even then a bigger load of armament than the F-86 Sabre jets.