The

SKYWATCHER

PUBLIC RELATIONS BULLETIN

NO. 54 RCAF G.Ob.C. DETACHMENT

263½ George Street, . Peterborough, Ont.

The SKYWATCHER is a quarterly Ground Observer Corps public relations circular for distribution to official volunteers of the Corps by 54 GObC Detachment, all material, including photographs, cartoons, articles, stories, letters, suggestions, etc., must be forwarded to:

The SKYWATCHER
54 Ground Observer Corps Detachment
263 ½ George Street North
PETERBOROUGH, ONTARIO.

(Views expressed in the "Skywatcher" upon controversial subjects are the views of the writers expressing them. They do not necessarily reflect the official opinions of the Royal Canadian Air Force).

#5 GOBC UNIT'S NEW COMMANDING OFFICER

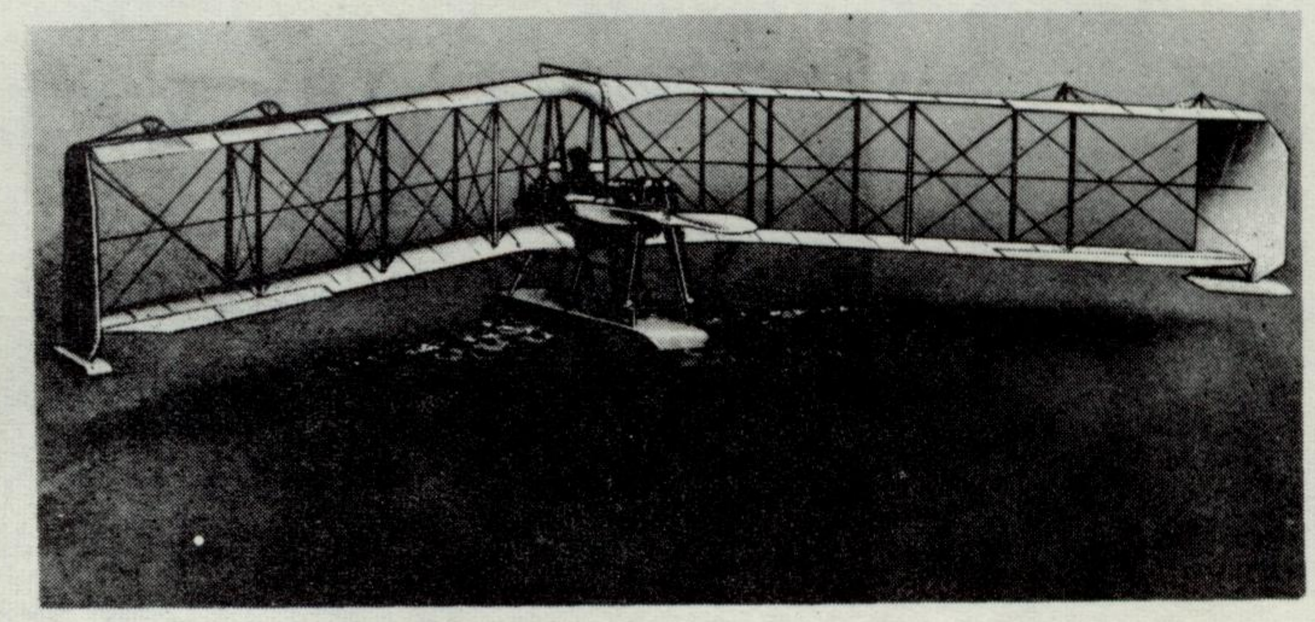
S/L J.R. Bell, CD

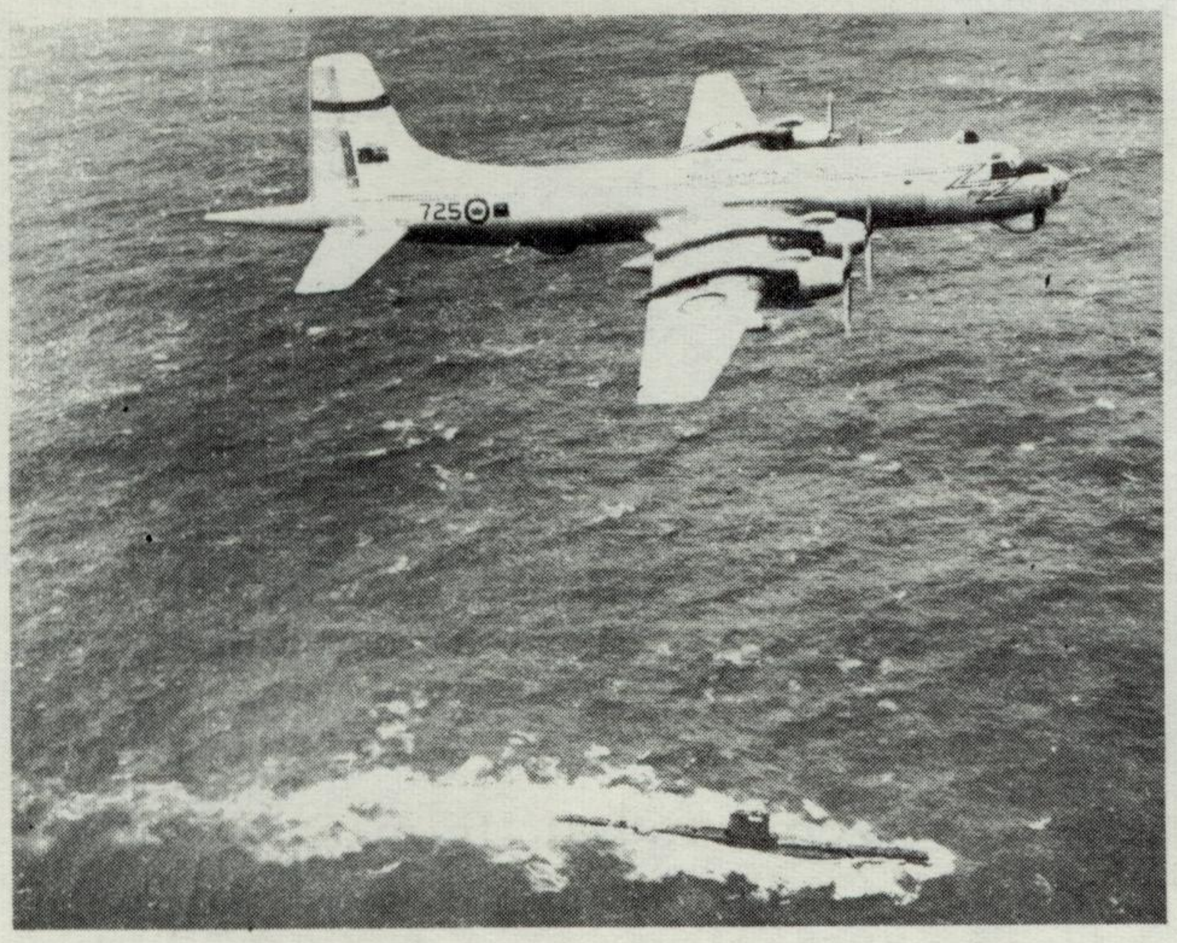
Born and educated in Lawson, Sask., S/L Bell joined the Army Militia in 1937 and remustered to the Army Medical Corps in 1939. He transferred to the RCAF in 1940 and received his pilot's wings in July 1941.

After graduation he flew with Coastal Command at Ucluilet, B.C., and Yarmouth, N.S., until 1943 after which he flew with RCAF Ferry Command until 1944 based at Montreal. After further training at Pennfield Ridge and Winnipeg he flew with 124 Ferry Squadron until 1946. From 1946 to 1952 he flew with 426 Squadron at Dartmouth and Dorval and during this period he participated in the Korean airlift from 1950 to 1952. He was appointed Chief Administrative Officer at Calgary in 1952 where he served until 1953. From 1953 to 1957 he served Overseas with No. 1 Air Division Metz and No. 1 Group HQ. In 1957 he returned to Canada and was appointed Chief Administrative Officer of RCAF Station North Bay where he served until he was named Commanding Officer of 5 Ground Observer Corps Unit headquarters in North Bay in August 1959. S/L Bell's wife Betty is from Kingston, Ont. They have two children.

CANADA'S FIRST - The Burgess-Dunne of 1914, purchased for $5,000 to equip the just-formed Canadian Aviation Corps, was Canada's first military aircraft. It accompanied the First Contingent overseas in October, 1914. Unfortunately, history records that the aircraft never saw action. Neglected on the English airfield it soon became a pile of "worthless junk".

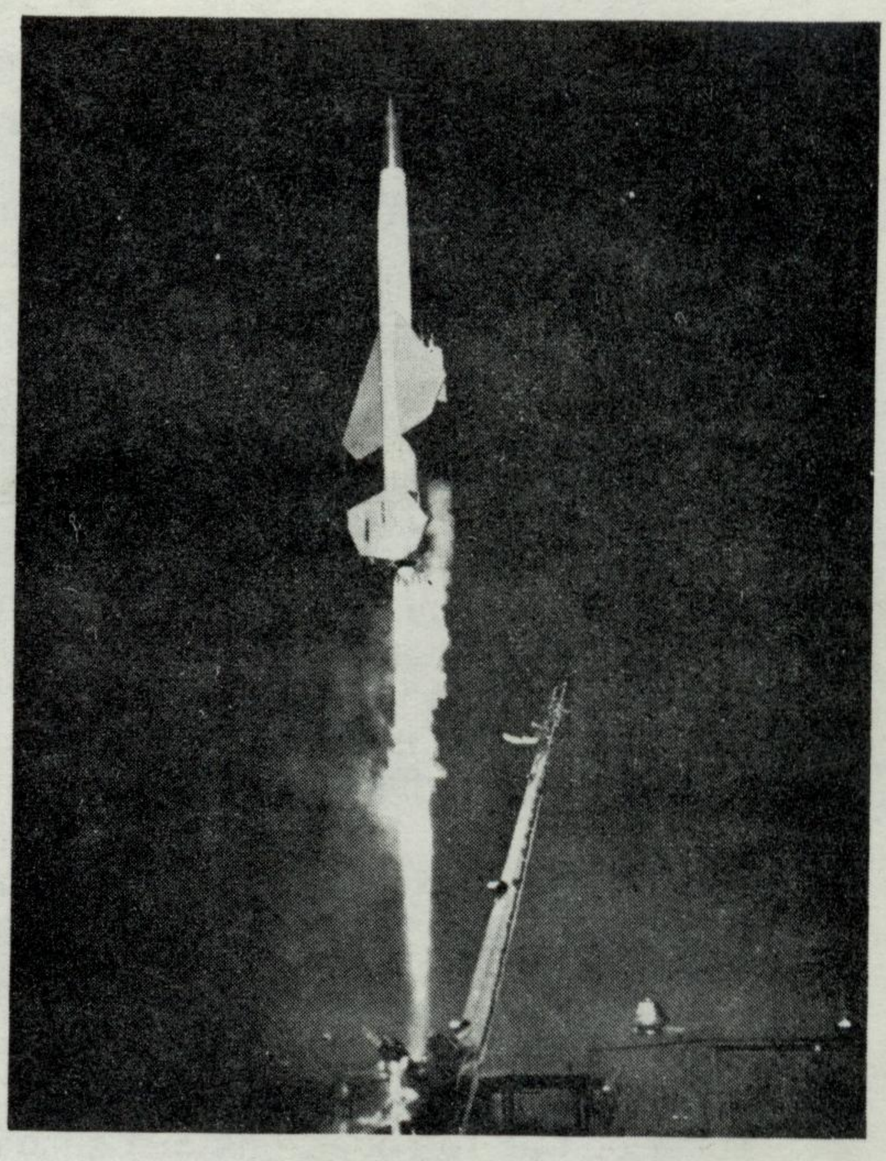
(National Defence Photo)





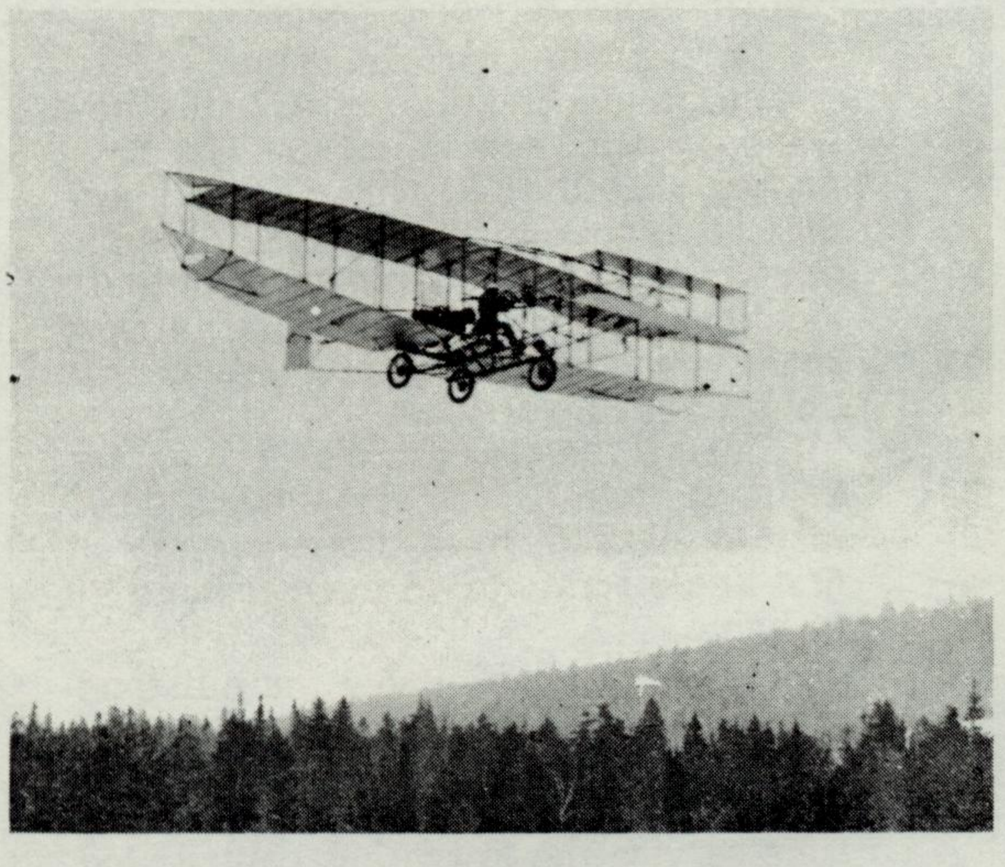
RCAF'S NEWEST - Latest aircraft to go into service with the RCAF is the "Argus" submarine hunter-killer, a graphic symbol of Canada's aviation progress. The most modern and best of its type in the world, the Argus is shown here in a typical setting during exercises in the North Atlantic. Carrying a crew of 15 men, this giant ranges as far as 4,000 miles from base on its long patrols.

(National Defence Photo)



DAWN OF A NEW ERA - The Bomarc, a pilotless interceptor shown here as it blasts off from its launching shelter, represents the dawn of a new era. To equip two RCAF bases in the near future, the Bomarc represents Canada's first step into the missile age. It can be equipped with a nuclear warhead.

(National Defence Photo)



HISTORY RELIVED - Over the trees at Baddeck, N.S., on February 23, 1959, the RCAF-built replica of the Silver Star recreates the first powered flight in Canada on the 50th Anniversary of the event. At the controls is Wing Commander Paul Hartman of Ottawa. The Silver Dart replica is to appear as part of the ground displays at a number of "Golden Hawk" exhibitions during the Summer.

(National Defence Photo)

The RCAF's 35 Years

Today, the Royal Canadian Air Force marks the end of its first 35 years of operation. It was on April 1, 1924, that the prefix "Royal" was added to the title of the Canadian Air Force and the non-permanent, non-professional CAF became a permanent part of the defence establishment with an approved strength of 68 officers and 307 airmen.

The RCAF's 35th birthday comes in a year of decision and transition in Canadian aviation. While the introduction of jet airliners is transforming the civilian aviation picture, the development of missiles is having an even more revolutionary effect in the military field.

Already this year, the Canadian Government has decided against further development and production of the Arrow interceptor, which had been destined for the RCAF's nine home defence squadrons and, perhaps, for some of the 12 squadrons of Canada's First Air Division in Europe.

Instead, Canada is to be supplied with American BOMARC missiles, directed to their targets by a SAGE (semi-automatic ground environment), electronic computing system.

The RCAF is taking over direction of the DEW radar line in the Arctic; United States Air Force squadrons are to be given more operational and refuelling bases on Canadian territory.

All these are major decisions, major innovations. They reflect the sweeping changes that must follow swift advances in weapons and weapons-carrying development. They reflect, too, the need for some sharing of sovereignty that is required for efficient, co-ordinated defence of this continent by Canadian and American combined forces.

The other side of this sharing is the fact that an RCAF officer, the former Chief of Air Staff, Air Marshal Roy Slemon, is second-in-command of the combined Canadian - American air defence organization, NORAD.

For the RCAF, these changes mean reorganization to meet a new strategic plan, a reorganization which is faced by all modern air commands. The unmanned missile and the manned aircraft have to be merged into a new pattern in which each is given the job for which it is best fitted. This is the accepted fact today, that neither is a replacement for the other; the missile and the man form a complementary team.

In the RCAF, for instance, it is only the home defence squadrons, nine out of the RCAF's total of 40, which are affected by the Arrow - BOMARC decision so far.

Meanwhile, other re-equipment programs are already under way. Maritime Command is receiving Canadian-built Argus submarine-hunters; these 74-ton monsters, rated the best-equipped of their type in the Western world, offer an impressive proof of RCAF growth in themselves.

Big new turbo-prop transport aircraft are also being built for the RCAF, to enable it to modernize its large trooping and freighting duties both at home and around the world. Canada's interest in promoting such establishments as the UN Emergency Force in the Middle East makes Transport Command one of this country's important contributions to world peace.

During the years to come, the reorganization of the RCAF to new weapons and new missions will be a major job. But it will be no more difficult than similar jobs the Force has done in the past. The record of military aviation in Canada, in fact, almost seems like one long list of reorganizations and conversions.

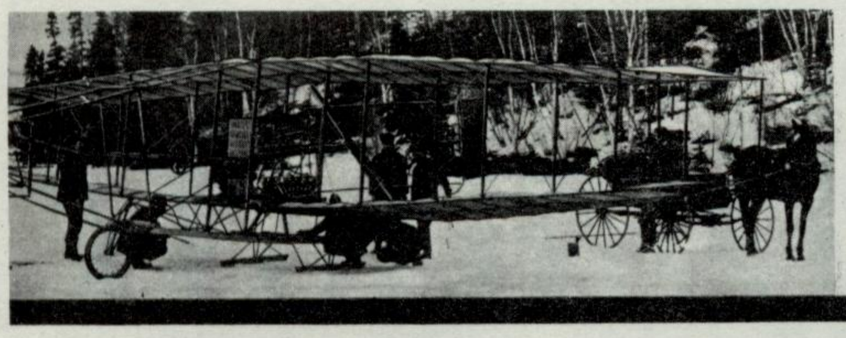
During the Second World War, for instance, the RCAF grew from 4,000 men to 206,000, from two squadrons of first-line aircraft to 48 overseas and 40 at home.

Most Canadians know the outstanding records established by Canadian military aviation in two world wars, but few realize the vast amount of peacetime service the Force has contributed. The record includes all Canada's pioneer work in air mapping and air surveying, forest fire patrol, air mail delivery, winter flying, Arctic flying, search and rescue and air ambulance work.

In all these various fields, the same standards of service have been maintained. Reorganization, new missions, can hold no fears for a service with a record like that.

The record proves that the Royal Canadian Air Force can face the future with complete confidence in its ability to meet whatever the future may bring.

SOME INTERESTING COMPARISONS

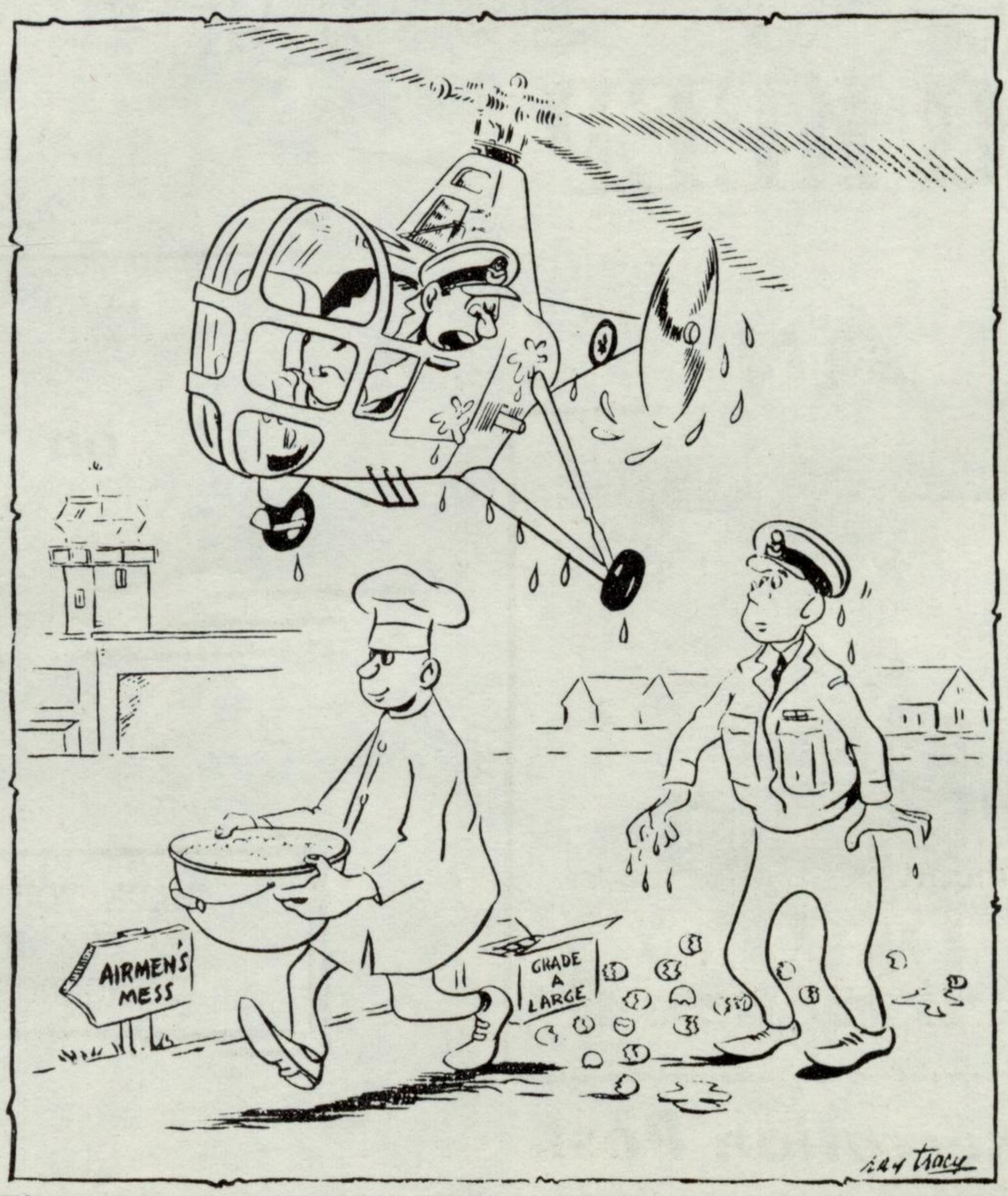


SILVER DART

Length	32 feet
Wing Span	49 feet
Weight	750 lbs.
Longest Flight	20 miles
Crew	1
Engine	One Curtiss Engine rated at 50 H.P.

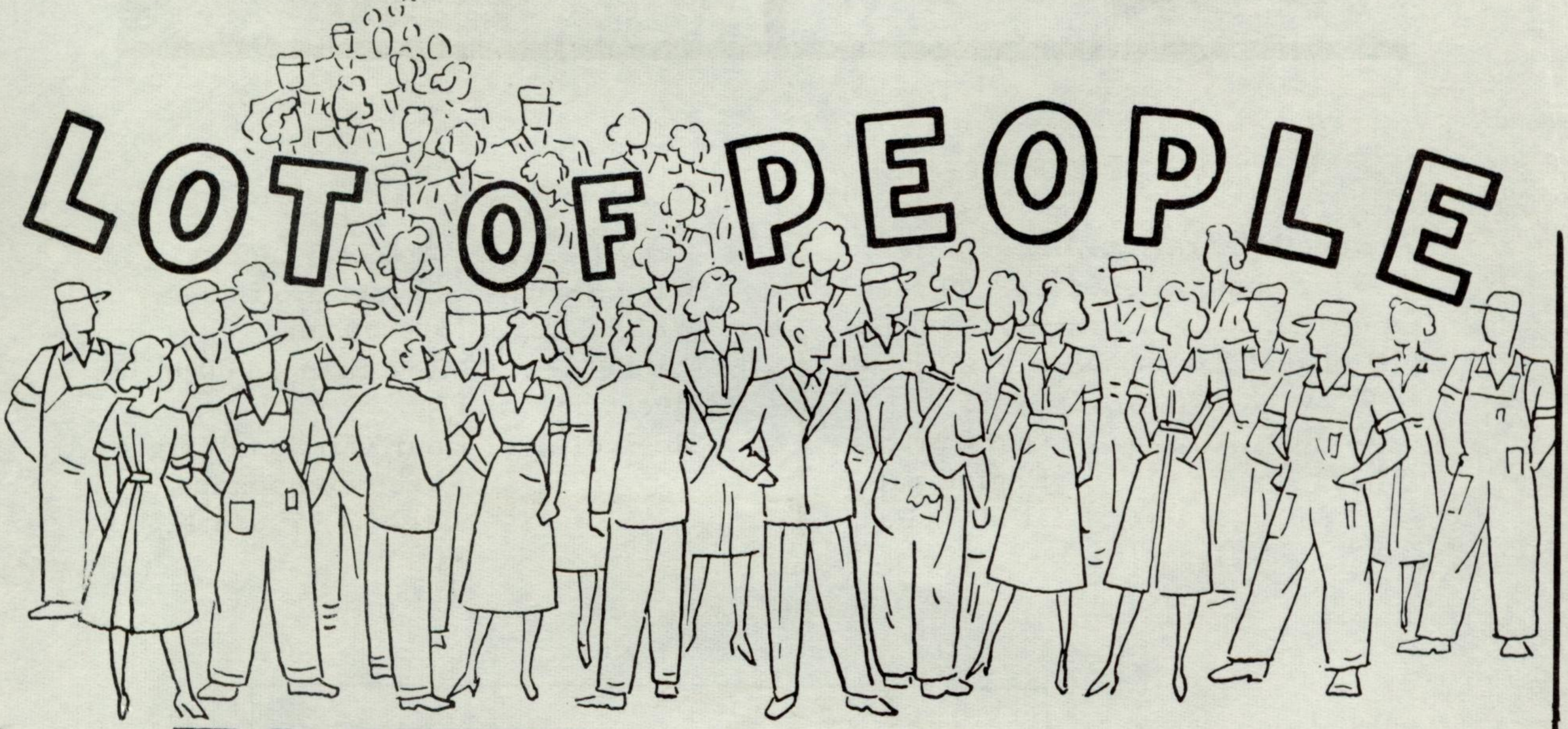
ARGUS

Length	128 feet 3 inches
Wing Span ..	142 feet 3.6 inches
Weight	150,000 lbs.
Range	More than 4,000 miles
Crew	15
Engines	Four Curtiss-Wright Turbo compounds rated at 3700 H.P. each.



"Why can't he use an ORDINARY EGG-BEATER like the other cooks on the station!?"

IT TAKES A



TO KEEP

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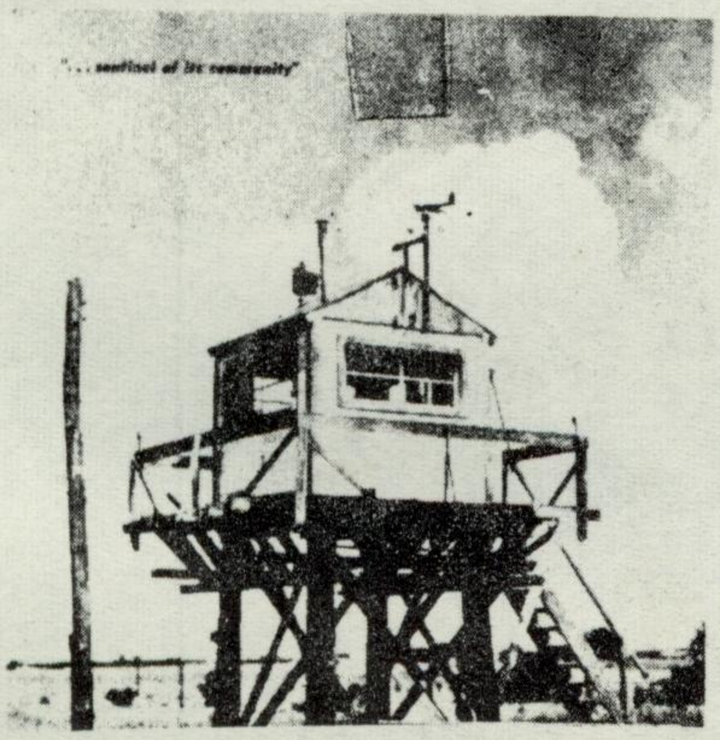
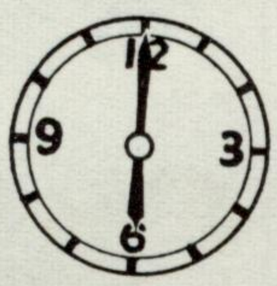


Observation Post

on 24-Hour duty'

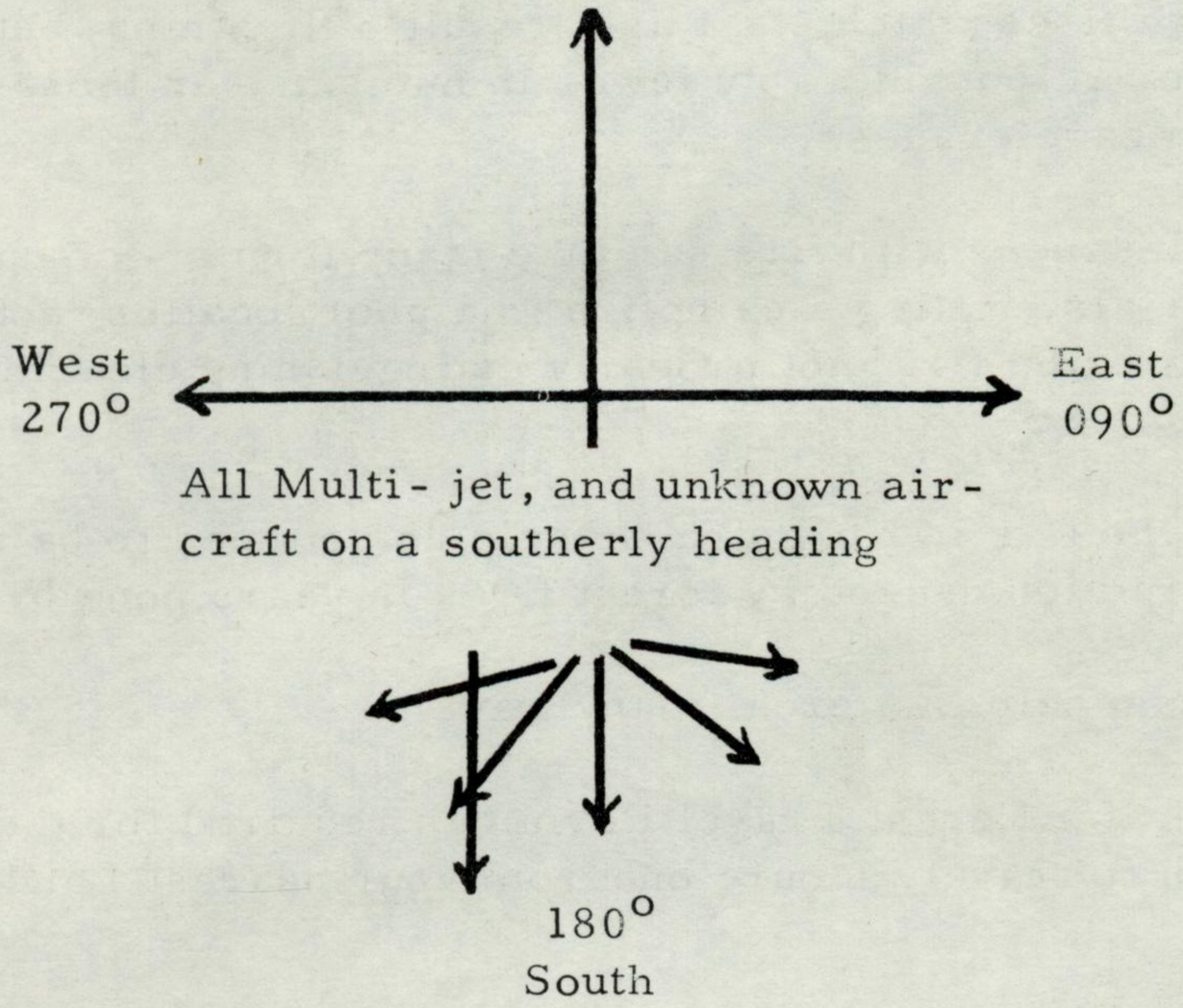


HAVE YOU ENOUGH OBSERVERS TO DO THE JOB IN THE EVENT OF AN EMERGENCY?

Operations

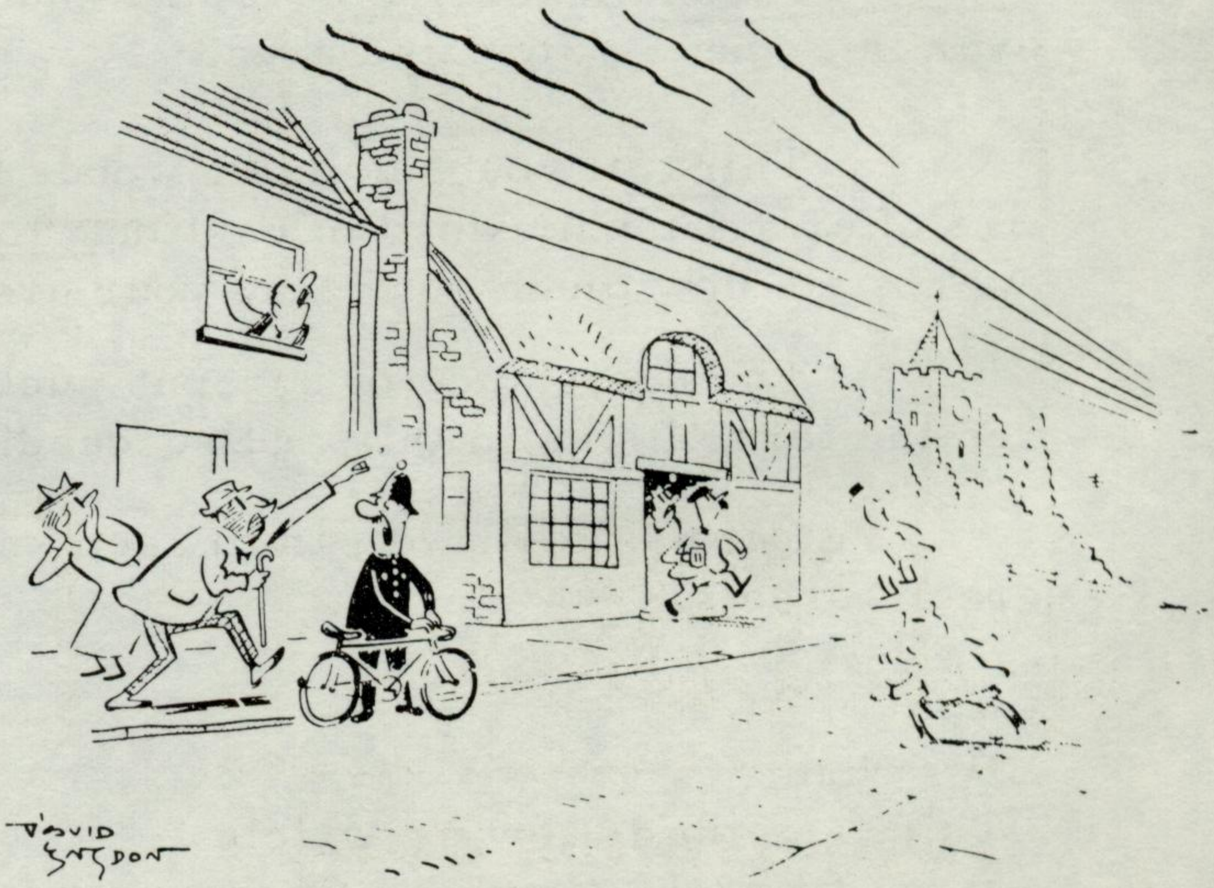
Air Defence Command Headquarters have reviewed our reporting policy and now state that reports on bi-motor piston aircraft are not to be phoned in to the Filter Center, but are to be recorded by the observation post for search and rescue purposes in the case of a lost or crashed aircraft.

Only multi, jets, and unknown aircraft on a southerly heading from 090 to 270 (see the following diagram) are to be reported to the Filter Center.



All Multi- jet, and unknown aircraft on a southerly heading

"John's a member of the Ground Observer Corps!"



"O' course I did. Engine and chassis number. . . . "

TO ALL GROUND OBSERVERS:

I suppose the reason you are a member of the Ground Observer Corps is because you are a public-spirited individual, wishing to take part in the country-wide aircraft detection programme.

You, as a public-spirited citizen, can make an additional contribution to our country's welfare without too much effort on your part.

As the winter's snow disappears and the forested areas become green our concern for fires in the forests returns once again. Each year in spite of everyone's alleged desires to see our forests remain green, large areas are blackened through careless handling of fire in the woods. True, there are fires which start as a result of lightning, but generally speaking these are considerably fewer in number than those caused through human carelessness.

Carelessness with fire can take many forms - discarding lighted smoking materials, setting a campfire in a poor location, not completely extinguishing a camp fire, not properly extinguishing clearing or rubbish fires, and so on.

You who live in Northern Ontario do not need to be reminded of the great destruction caused by forest fires in years gone by.

You can help in a great many ways.

First, if a Forest Travel Permit is required for the area in which you wish to travel, secure one from your nearest Lands and Forest Headquarters.

Second, exercise care and caution with fire in any form whenever in or near a forested area.

Third, if you see other woods travellers being careless with fire offer a friendly word of caution. He may be new in the area and not appreciate how much you value your green forests.

The assistance of persons such as yourself should help in preventing forest fires in this and succeeding years.

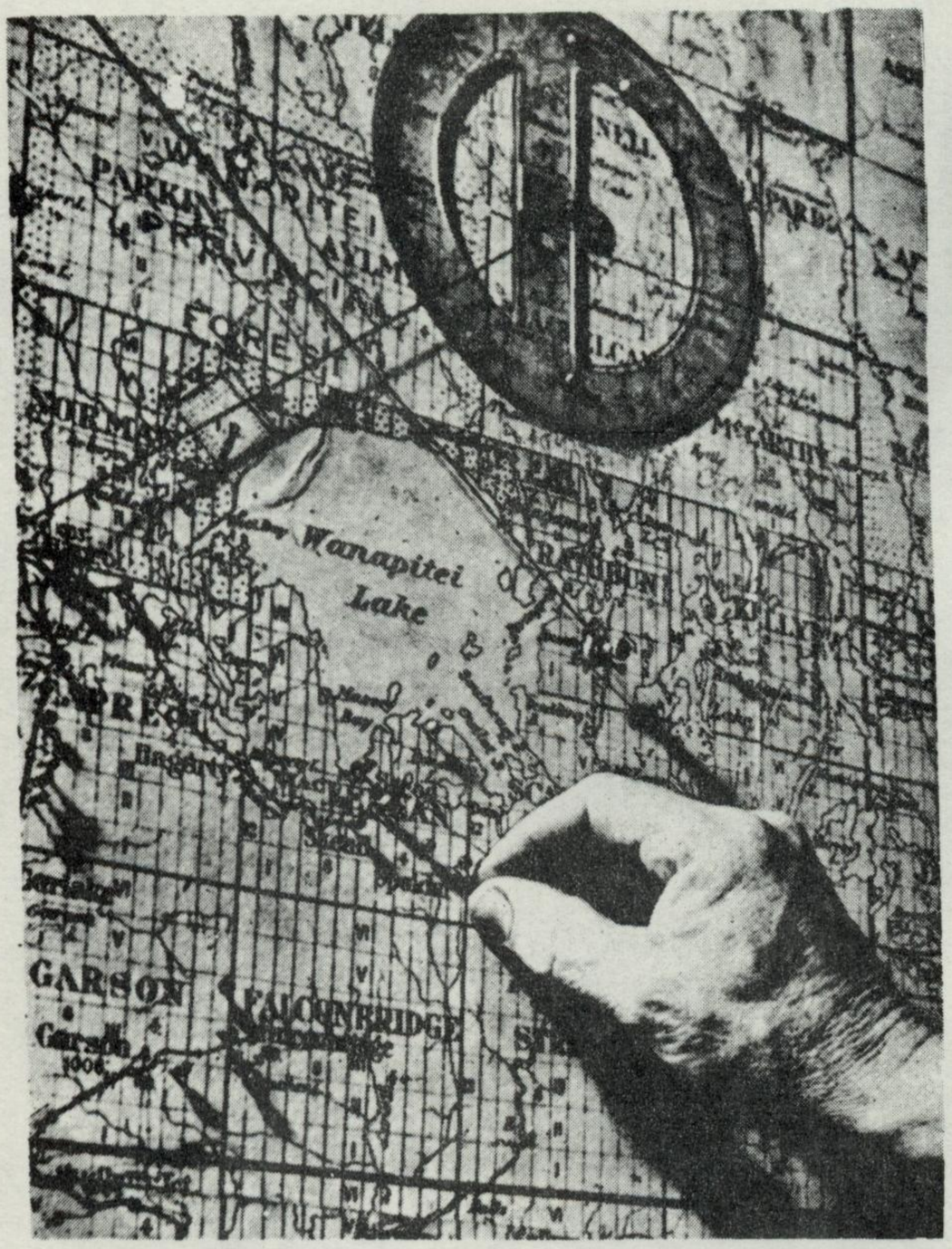
Let us do all we can to keep known friendly aircraft flying over green forests.

ED's Note:
This, and the following article taken from the Northern Observer, North Bay.

A.J. Herridge,
Regional Supervisor,
Sault Ste. Marie, Ontario.

The picture below illustrates a cross fix bearing has been made on a puff of smoke. This cross fix pinpoints the fire area and should the condition warrant immediate action, men and materials can be rushed to the scene.

These alidades could also be used to pinpoint a crashed aircraft. By reporting the exact position to the filter centre the necessary search and rescue could be actioned in a minimum amount of time thereby assisting to save a life or lives.



Helicopters are used mainly by the Lands and Forests to freight the men and equipment to a fire.

Help to Keep our Forests Green!


STAFF
NEWS

Introducing...

Flight Lieutenant William Dyck

"Bill" Dyck, the new Detachment Commander, arrived in Aug from Gander, Newfoundland. No stranger to Ontario, he has served previously in North Bay area both in the Filter Centre and in the Unit. Bill and his family (two boys and a girl) will take up residence in the heart of the vacation land immediately.

also .....

LAC "Roy" Wood who comes to 54 GObC Detachment from Sydney, N.S.

HERE IS AN OLD FRIEND AT WORK IN THE FAR NORTH .....

F/O JACK CRAWFORD...
That is Jack on the right.

PROMOTION ANNOUNCEMENT

To Corporal::::::
PETE MITCHELL formerly of Port Arthur and lately from RCAF Station Mont Apica.

WEDDING ANNOUNCEMENTS

LAC Ernie Pierce on
1 Aug 59

LAC Gordon Fisher on
7 Aug 59

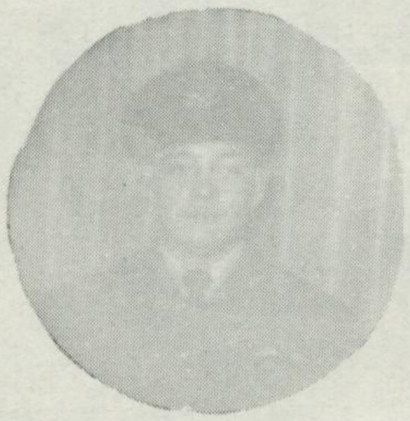
GOING PLACES

F/L William "BILL" Wood formerly Detachment Commander at Peterborough now holding the same position at Gander, Newfoundland. We all wish Bill and his family the Best of Luck.

F/O Gerry Russell who has been a patient at Sunnybrook Hospital, Toronto since his accident in Nov 58 is progressing rapidly. Gerry is allowed home occasionally now and is on the mend. Quick recovery Gerry .....

F/O John Sperdakos who was with the Peterborough Detachment for about a year has returned to civilian life after almost eight and a half years with the RCAF. All wish John the best of luck in his future position.

Sgt. Alf Frier was transferred to RCAF Station Parent. Alf was with the Detachment for three years and certainly will be missed by all of us. Good luck, Alf, drop us a line soon.



F/O Harry Lambert, who has been with us for a year is returning to "civy street" in September. Harry has been flying fast and high in a CF 100 and feels qualified to carry on, at a lower rate of speed and height, in the trucking business. Good luck from all at 54 GObC detachment.

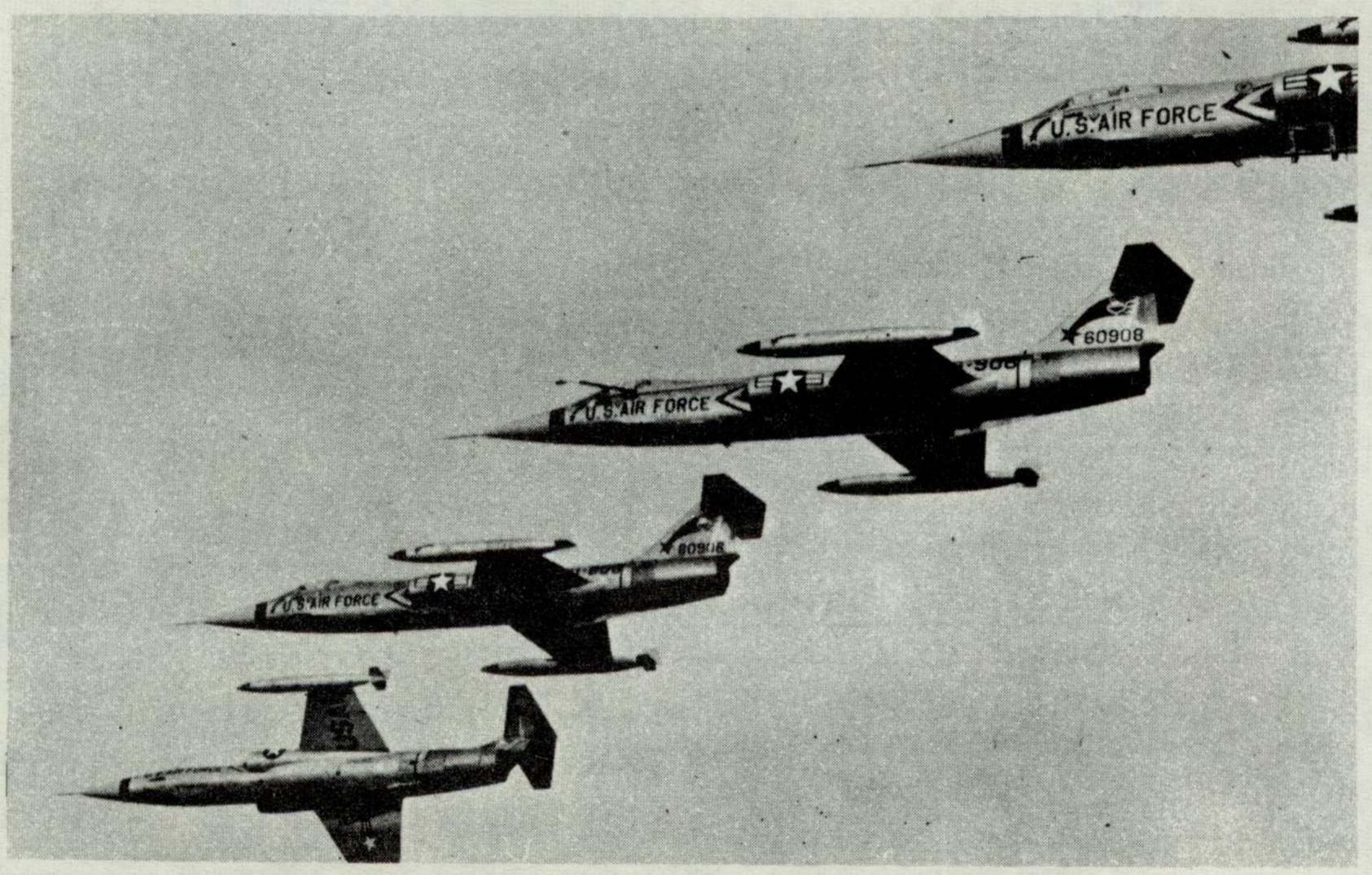
Cpl Walter Masztalertz has been transferred to RCAF Station Mont Apica. Walt was our sports enthusiast and won several trophys for the Detachment. Best of luck from the gang at 54.

OUR NEWEST AIRCRAFT

The Government has announced that the F86 Sabre is to be replaced by the Lockheed F104. The F104, known also as a Starfighter, is perhaps the smallest combat jet fighter used to-day. The dimensions are as follows:

Span (without tip-tanks)	21 ft 11 in
Length	54 ft 9 in
Height	13 ft 6 in
Weight	Max. loaded weight approx. 15,000 lbs.

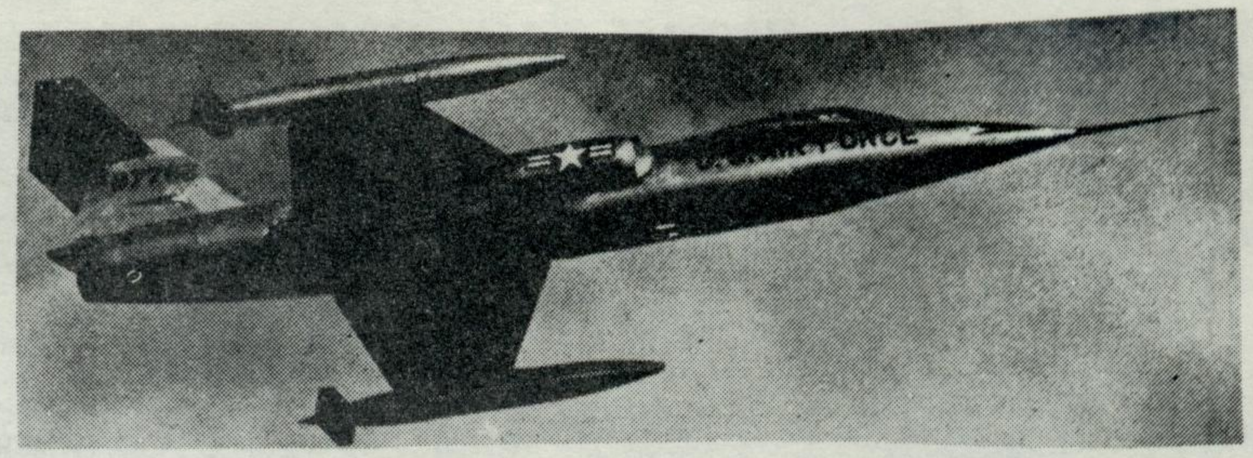
A comparison with the F86, its predecessor in the role of the RCAF's single seat fighter, is as follows:



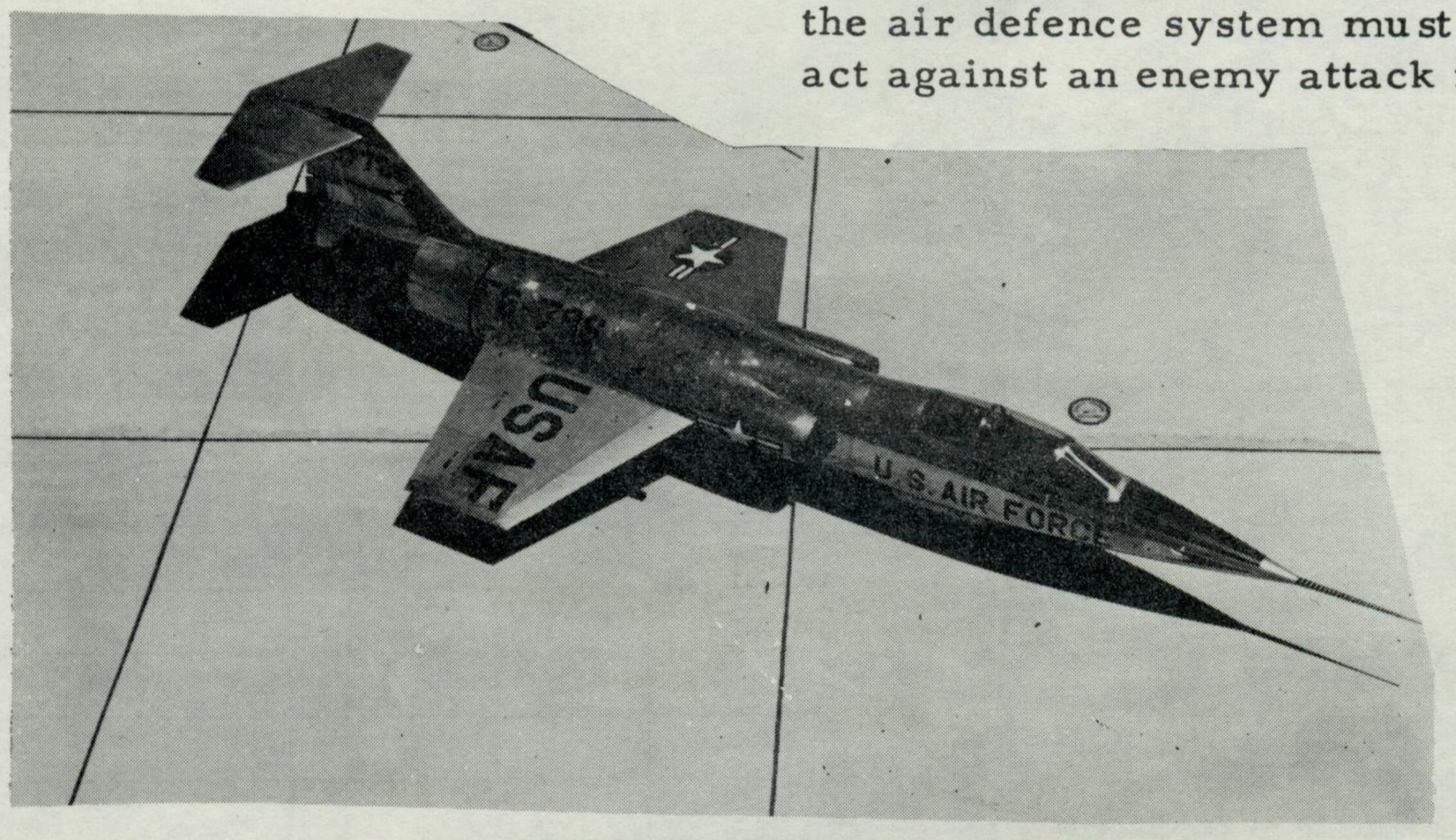
Span	37 ft 1 in
Length	37 ft 6 in
Height	14 ft 9 in
Weight	16,500 lbs.

Sharp manoeuverability at supersonic speeds was a prime consideration in the design of the F104. Straight thin wings - almost knife keen along the edge - are placed about two thirds of the way back on the fuselage, slanting downward. The horizontal stabilizer is placed high on the fin and moves as a single unit instead of having a separate elevator surface as on most planes.

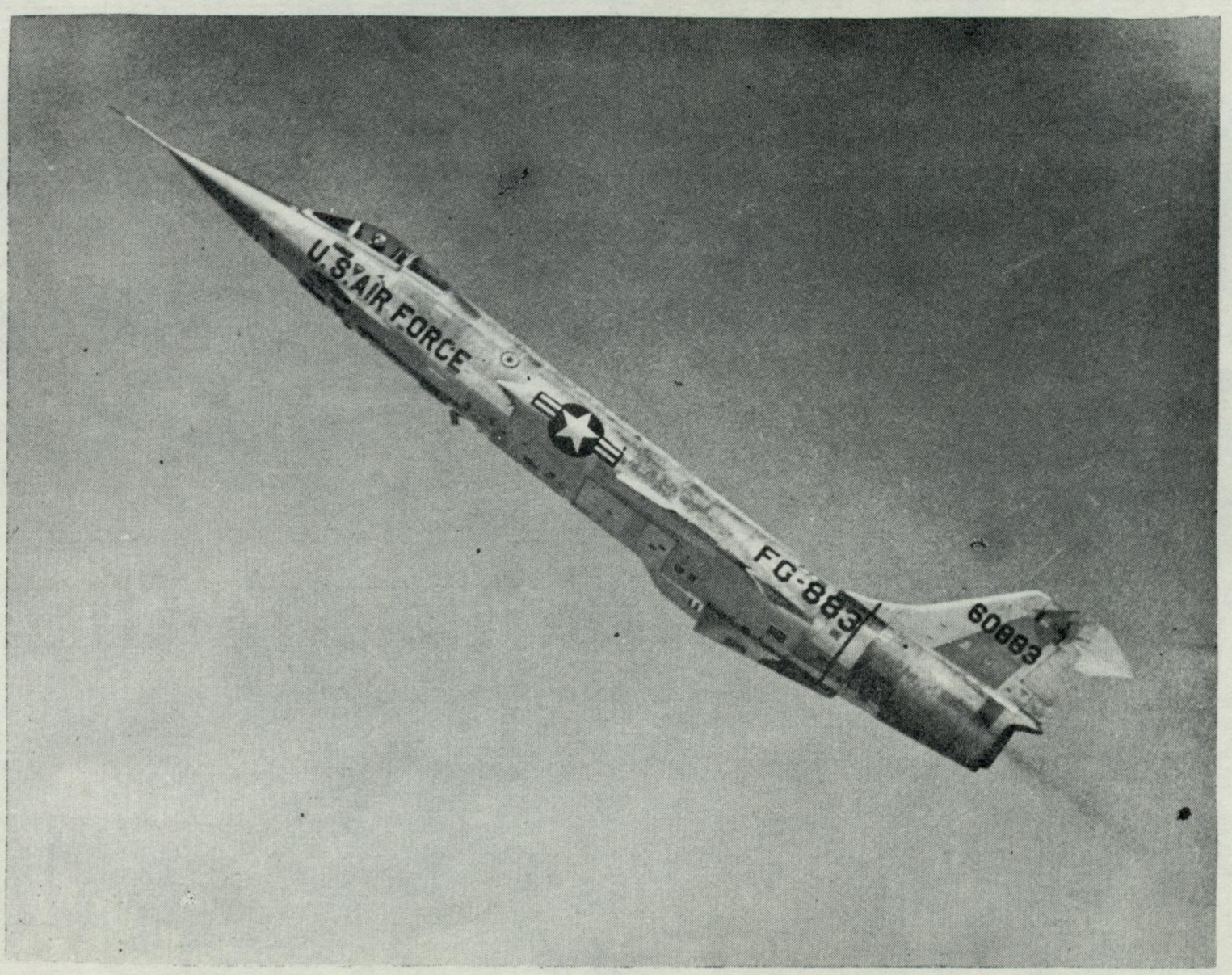
This aircraft can overfly any known bomber and easily at twice the speed of sound, or in excess of 1,450 miles per hour.



The fantastic performance capabilities of the F104 gives an idea of the rapidity with which the air defence system must be able to react against an enemy attack in this country.



What this increase in speed means in tactical terms is th that an attacking force can be met at the earliest possible moment at the maximum distance from our homes.



AIRCRAFT FLASH MESSAGE RECORD

OBSERVATION POST CODE *(Name) (Name) (Number) (Color)*

Aircraft

INSTRUCTIONS

Call your telephone operator and say, "AIRCRAFT FLASH." *(Give telephone operator your quadrant, telephone exchange and number.)* Operator will connect you with your Air Defense Filter Center. When the air defense operator answers and says, "Air Defense, go ahead," you say, "AIRCRAFT FLASH," and continue message completed below, in order indicated.

LINE NUMBER	NUMBER OF AIRCRAFT *One Two Three Four Many Unknown* 1	TYPE OF AIRCRAFT *Single- Bi- Multi- Jet Unknown* 2	FUNCTION OF AIRCRAFT *Fighter Bomber Cargo Seaplane Trainer Unknown* 3	ALTITUDE OF AIRCRAFT *Very low Low High Very high Unknown* 4	TIME DELAY IN REPORTING	CODE NAME OF O. P. *(See top*	DIRECTION OF AIRCRAFT FROM O. P.	DISTANCE AIRCRAFT FROM O. P.	DIRECTION AIRCRAFT ARE FLYING *(Say "Flying," then give direction)* 9	SPECIAL REMARKS *EXAMPLES: Hostile aircraft, blimp, helicopter, aircraft in combat or distress, etc.* 10
1	1	J	B							IL-28
2	1	B	B							NEPTUNE
3	1	M	C							VISCOUNT
4	1	J	B							BLOWLAMP
5	1	M	C							C-124
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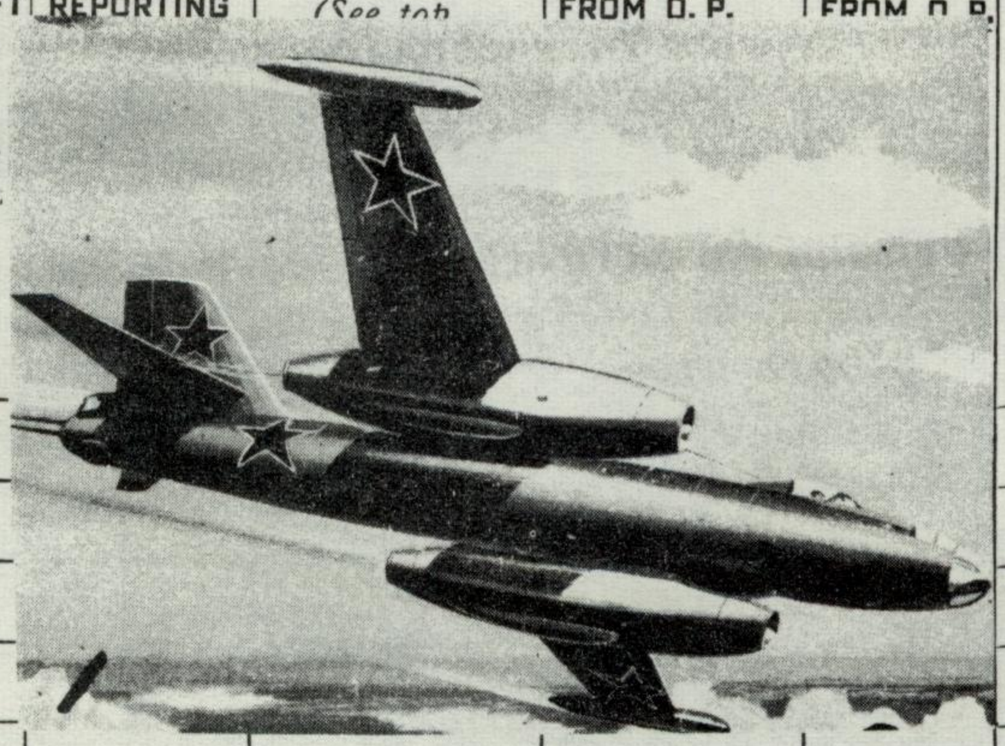
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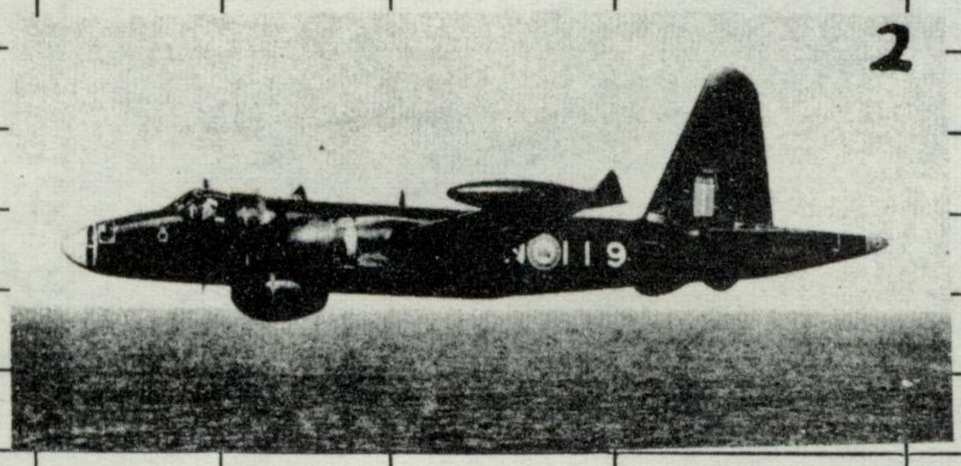
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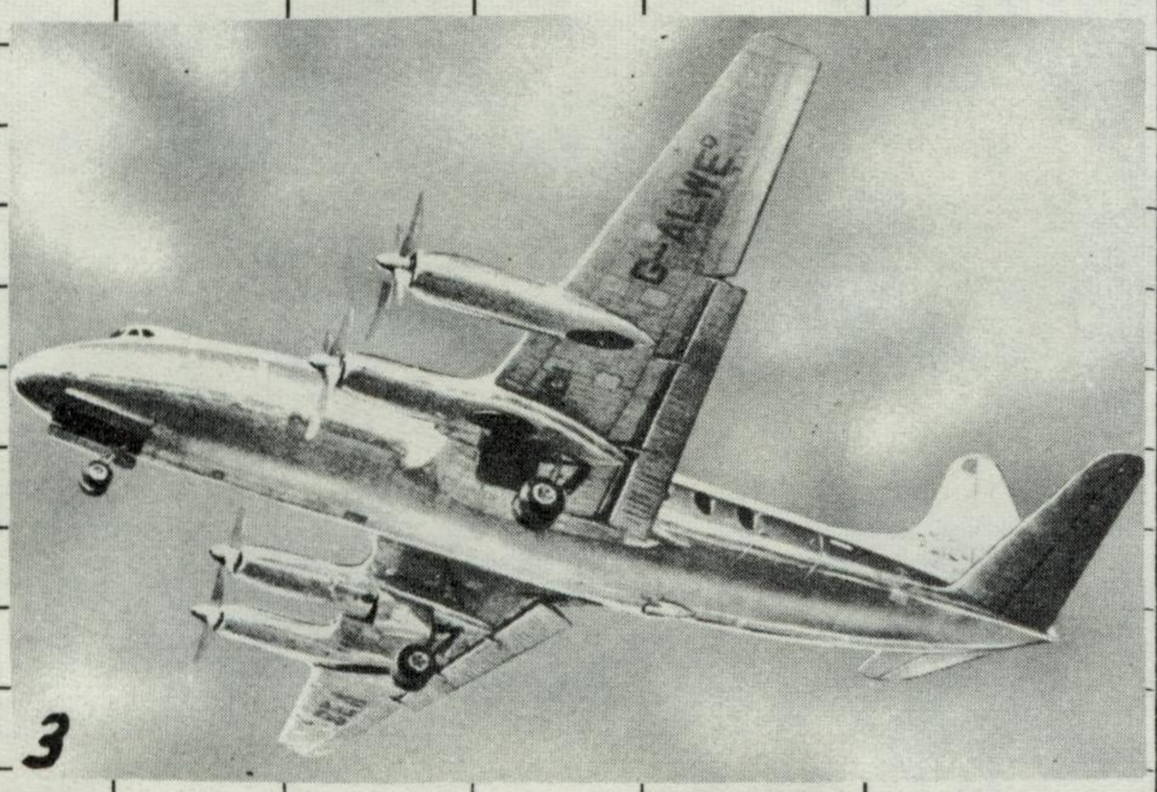
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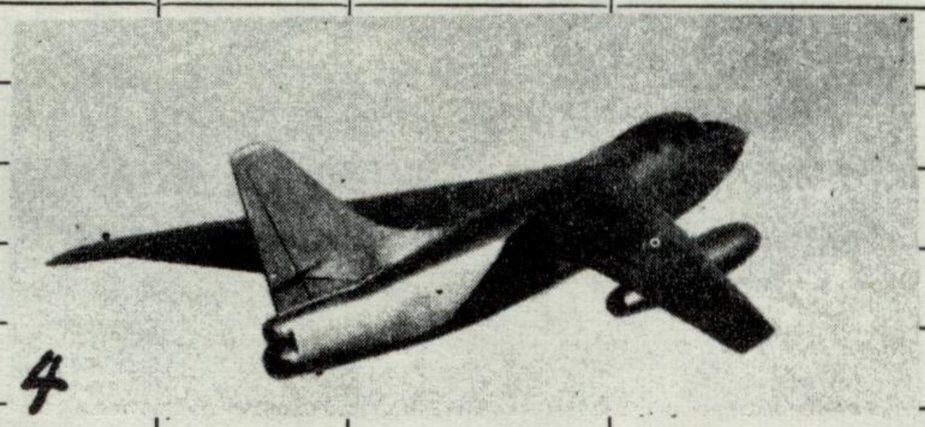
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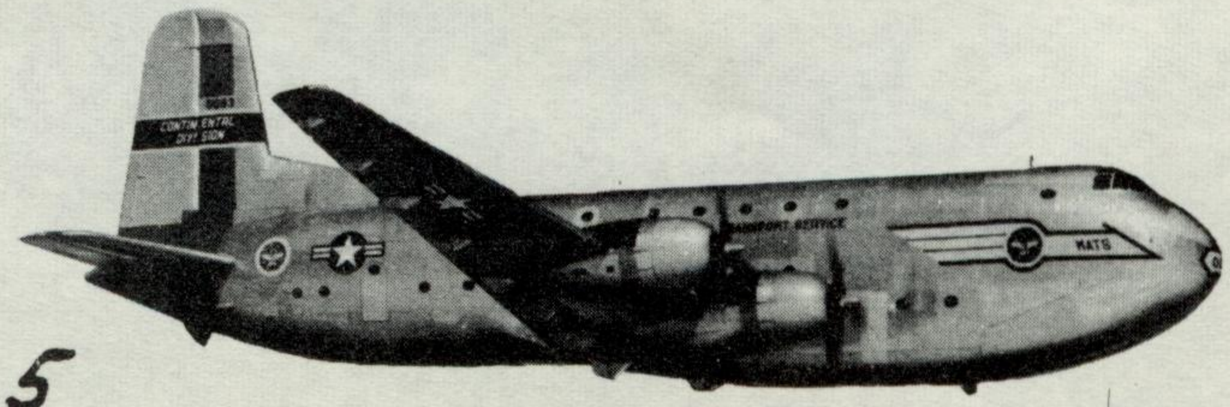

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Recognition

FLASH MESSAGE RECORD

(Number) (Color)

DATE *(Day, month, year)*

PHONE EXCHANGE AND NO.

INSTRUCTIONS

Call your telephone operator and say, "AIRCRAFT FLASH." *(Give telephone operator your quadrant, telephone exchange and number.)* Operator will connect you with your Air Defense Filter Center. When the air defense operator answers and says, "Air Defense, go ahead," you say, "AIRCRAFT FLASH," and continue message completed below, in order indicated.

LINE NUMBER	NUMBER OF AIRCRAFT *One* *Two* *Three* *Four* *Many* *Unknown*	TYPE OF AIRCRAFT *Single-* *Bi-* *Multi-* *Jet* *Unknown*	FUNCTION OF AIRCRAFT *Fighter* *Bomber* *Cargo* *Seaplane* *Trainer* *Unknown*	ALTITUDE OF AIRCRAFT *Very low* *Low* *High* *Very high* *Unknown*	TIME DELAY IN REPORTING *Report to nearest minute. Say, "Delay — minutes"; or, if less than 30 seconds, say, "No delay"*	CODE NAME OF O. P. *(See top center of page)*	DIRECTION OF AIRCRAFT FROM O. P. N NW NE W E SW SE S OR "OVERHEAD" *(All aircraft within ½ mile of the O. P.)*	DISTANCE AIRCRAFT FROM O. P. *(Record to nearest mile)*	DIRECTION AIRCRAFT ARE FLYING N NW NE W E SW SE S *(Say "Flying," then give direction)*	SPECIAL REMARKS *EXAMPLES: Hostile aircraft, blimp, helicopter, aircraft in combat or distress, etc.*
	8								9	10
1										
2										
3										
4										
5										
6	1	H	C							CONSTELLATION
7	1	J	C							COMET
8	1	J	B							B 52
9	1	H	B							ARGUS
10	1	J	B							B 47
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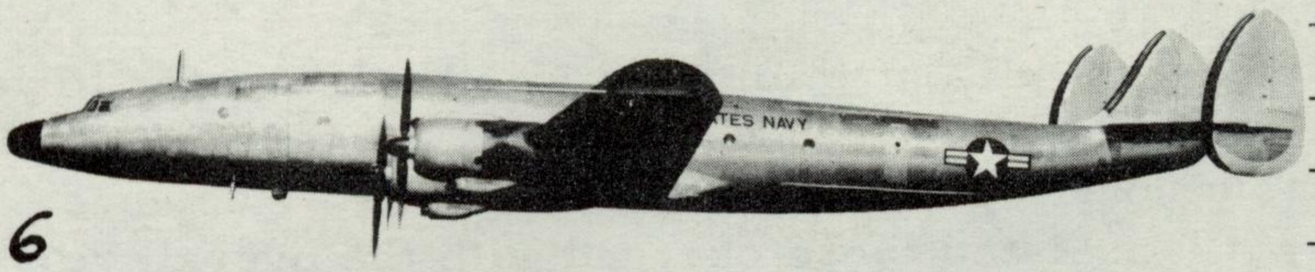

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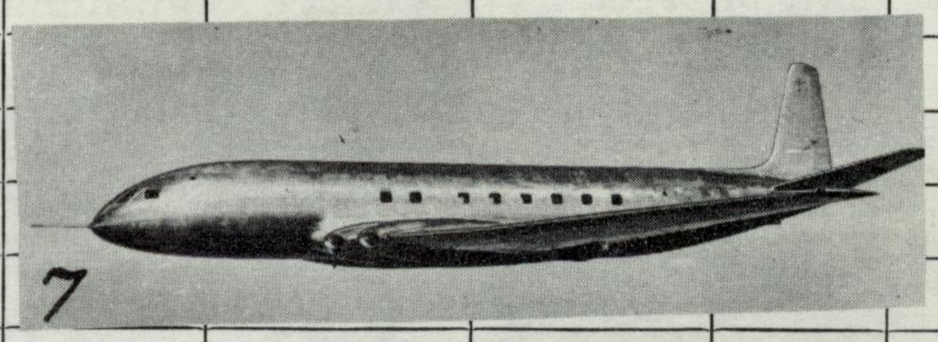
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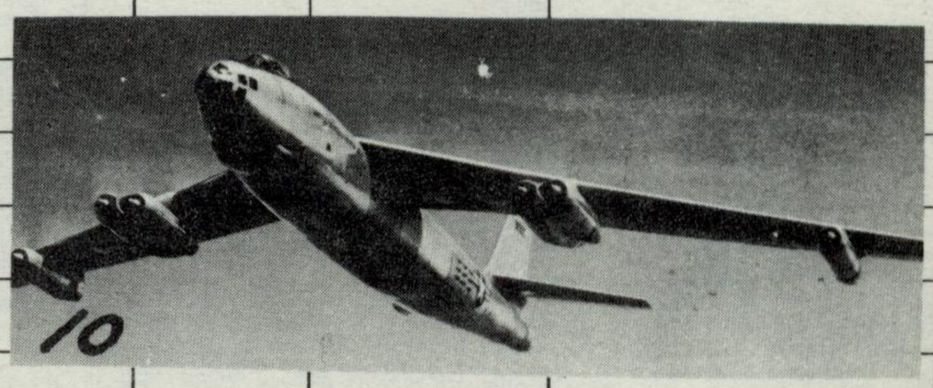
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000-12 (AOC)

St. Hubert, Quebec,
30th July, 1959.

Mr. John M. Coulson,
Regional Supervisor,
RCAF Ground Observer Corps,
Valentia, Ontario.

Dear Mr. Coulson:

It is indeed a pleasure for me to write this letter to you concerning your work in the RCAF Ground Observer Corps. Your enthusiastic and capable contributions to this arm of the air defence organization have greatly assisted those charged with the overall responsibility of the Air Defence of Canada and North America.

In particular I wish to commend you for the part you played in the saving of a life in Tel Hoshamayr, Israel, by relaying a radio message. This event showed the clear thinking and precise action which are in keeping with the best traditions of the Ground Observer Corps. It is gratifying to know that we of the RCAF have the unfailing support of Canadians such as yourself.

Sincerely,

(W.R. MacBrien)
Air Vice-Marshal
Air Officer Commanding
Air Defence Command

Certified a True Copy

(WH Dyck) F/L

Ed's Note:
The above is a copy of a letter received by Mr. Coulson from the Air Officer Commanding, Air Defence Command. Congratulations Jack on a job well done.

MOCK BUSTERS

In the realm of the supersonic, a new symbol for speed -- the Mach Number (pronounced MOCK)--has replaced mph and knots to a very large extent in the language of aeronautics.

Not that mph or knots have become antiquated. They are still vital to the jet pilot and the engineer. But in the supersonic where an aircraft is subjected to strange stresses and forces, a more direct and more constant relationship to the speed of sound is essential.

The test pilot must have an instrument which immediately gives him his speed in relation to the speed of sound, which of course varies with height. At sea level the speed of sound is approximately 760 mph and at 40,000 feet, about 660 mph.

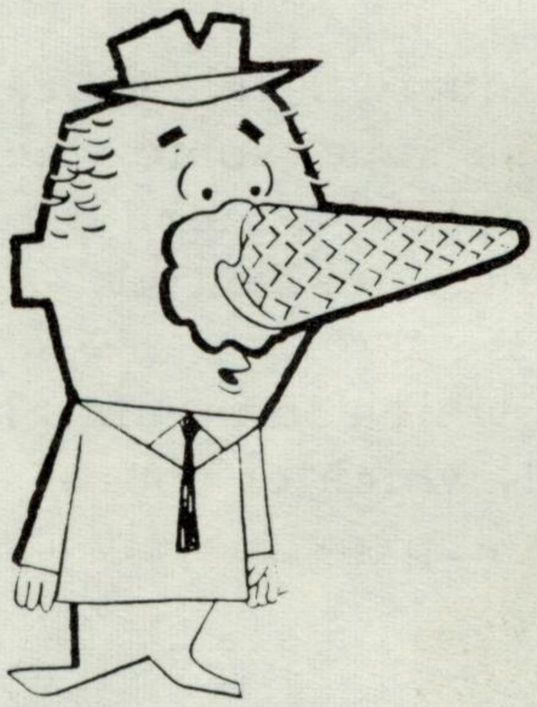
The Machmeter fills this need. A reading of Mach 1.5, for example, means 150% of the speed of sound, no matter what the altitude. With an ordinary air speed indicator, certain factors have to be applied to allow for height and altitude to get the same data. The test pilot on a supersonic mission is too busy to make these adjustments.

The new symbol of speed is an indirect tribute to Professor Ernst Mach, a German scientist who experimented with the speed of shells in flight long before the Wright Brothers took to the air.

Using high-speed cameras, Prof. Mach found that shock waves produced by a high velocity shell flowed out the back from the tip of the missile in the shape of a cone. This was first termed, the "Mach Angle" and later "Mach Number".

OUT OF THIS WORLD

A Double-Edged Glossary



NOSE CONE

EXOTIC FUEL

CELESTIAL GUIDANCE

SOPHISTICATED MISSILE

SCRUBBING A SHOT

Nose Cone — The cone-shaped nose of a rocket or missile. It is built to withstand friction caused by the high temperatures generated by hypersonic speeds.

Exotic Fuel — A fuel which uses chemicals having a very high rating, such as liquid hydrogen.

Celestial Guidance — A form of navigation using the celestial bodies as reference points much the way early sailors used the North Star.

Scrubbing a Shot — To postpone or cancel a scheduled missile firing.

Sophisticated Missile — Any of the larger and more advanced missiles which include refined, complicated equipment for guidance, communication, and data recording in space.

Ed. Note:
Reprinted from United Aircraft Corporation's "Bee-Hive"

A MESSAGE FOR ALL GOBC CIVILIAN VOLUNTEERS

FROM THE COMMANDING OFFICER

S/L J.E.L. Renaud, CD

On the eve of my departure from 5 Ground Observer Corps Unit, North Bay, I look back with pride on the wonderful support (both in the field and in the Filter Centre) you have given to me and my staff over the past four years. To the many of you I have already met, it was a pleasure meeting you and discussing the Air Defence of Canada; to those I have not yet met, be assured I shall do my utmost to visit you from my new location, as Staff Officer Ground Observer Corps, at Air Defence Command Headquarters, St. Hubert, Quebec.

To all of you I give my most sincere thanks for the fine work you have done and which, I am sure, you will continue to do in the future.


AIR DEFENCE COMMAND
ROYAL CANADIAN AIR FORCE
DETEGERE ET DESTRUERE

FROM

DETACHMENT COMMANDER
54 GOBC DETACHMENT
PETERBOROUGH ONTARIO

TO Elgin Vanwyck,
R.R.#1,
Balaclava, ONT.,

Queen's Printer and Controller of Stationery
Ottawa