



BETWEEN OURSELVES

PUBLISHED ONCE A MONTH BY

TRANS-CANADA AIR LINES *for Employees of All Departments*

EDITOR DON McLEOD ASSISTANT AL CARLSON
WINNIPEG, MANITOBA

April 1947, Issue No.49

The North Star Unveiled

April 15 was a mighty big day for TCA. In fact, it was probably the most significant day in the whole of TCA's bustling career since incorporation ten years ago.

April 15 marked the start of a new chapter in our airline's history. It hailed the beginning of a new era that burst upon us, bringing with it increased responsibilities and fresh problems. One that will demand greater endeavour in return for its greater rewards.

On April 15, TCA officially unveiled a new addition to its Skyliner fleet, and revealed it to the discerning eye of the travelling public. On that day a shining new North Star with its first load of revenue passengers in its spacious interior, tucked up its wheels and with a roar of its four Merlins whisked them across the north Atlantic to England.

April 15 is an important date not simply because it represents the realization of long-standing plans or the success of hard labors fraught with many a setback. Nor need we remember it only because we are now operating our first real four-engined commercial airliner or because we have something new on which to hang a TCA insignia.

This date has real moment, because at last we have matured in the field of international air transportation. From now on, we are on our own. We are competing on trans-oceanic routes with the best and most energetic airlines in the world. This is air travel's major league and it's not for the faint of heart, the weak, the halt or the blind.

Although the North Star equipment is new, we must put our faith in it. But if it is to prove its worth (and in its success lies our own) we will be required to make strenuous personal efforts.

We have been given the tools and the means to achievement. The futures of us all, both individual and collective, are our own responsibility. From here on in, it's up to us to make a job of it.

Skyliners of Canada

A NAME FOR THE FLEET

Make room in your vocabulary for a new expression. It's one that we hope will become as familiar in Canadian homes as the name of the family car.

No longer are TCA's aircraft to be known only by prosaic numbers and letters. From now on they are the SKYLINERS OF CANADA.

This colourful name is a fleet designation that has been given our aircraft by the Public Relations Department. Good, descriptive terminology will help fix TCA more firmly in the travelling public's eye. That is the simple but important purpose of this new name. At a later date, each aircraft may be christened individually.

Other airlines have "Mainliners" and "Flagships." Now, TCA has its "Skyliners."

North Star Enters T



We've waited a long time for it!

It's taken three years of working and planning, designing and building; it's taken months of test flying, shake-down flights and crew training.

But at last it's happened!

The North Stars are on active service. They have passed their tests, demonstrated their capabilities and now they have started to work.

On April 15, a North Star carried revenue passengers across the Atlantic to the United Kingdom for the first time. There was certainly nothing new in the actual crossing. We've been doing that with regularity since July, 1943. But the beginning of North Star operations heralded a new era for TCA in trans-oceanic travel.

The north Atlantic route is easily one of the world's most important airways. Here is the main aerial artery between the New World and the Old. Along it move the diplomats, government officials, business men, vacationists and others, who promote the interchange of trade, commerce and culture between two great continents. This route between Canada and the United Kingdom is also a major link

in inter-commonwealth communications. It provides business men from Halifax to Vancouver with speedy access to the industries of Britain and the continent. Along it travel vacationists revisiting old homes in England, and others discovering the wonders of Europe for the first time. There is a reverse side too, for to no less a degree do travellers from overseas, on business and pleasure, voyage quickly to Canada and the U.S. along this route by air.

Today, the North Star carries TCA's maple-leaf high over the Atlantic. Now we are in position to approach this traffic potential with the best that up-to-date air transportation has to offer. We can fly beside other international airlines, secure in the knowledge that we are no longer handicapped by equipment inadequate in capacity to meet our needs. We can carry more passengers and greater loads of cargo and mail. We are able to offer much better service than ever before. We can provide a degree of pleasure and comfort on long Atlantic flights as high as that to be found anywhere. And these are the requisites that make trans-oceanic travelling worth while.

Our war-born Lancasters have done a good

Trans-Atlantic Service



job of flying the Atlantic. They have served TCA well for nearly four years. Their record is exemplary. With limited capacity they have carried more than 8,000 passengers between Prestwick and Montreal and nearly 2½ million pounds of mail. But the Lancasters were designed for war-like purposes. In accommodation and luxury they just don't compare with the new North Stars. Now they have bowed out of TCA's international picture to make way for a better suited and more modern successor.

During these years of Lancaster operations, we have acquired the experience and gained the know-how of trans-oceanic flying. Our Atlantic pilots have come to know the over-the-water route as intimately as they do the way between Windsor and Toronto. Now the same experienced crews will be flying these routes at the controls of the North Stars.

To begin with, the North Stars will make four weekly round flights between Montreal, Prestwick and London, England. Later in the summer, as more equipment becomes available, this frequency of service may be increased to meet seasonal traffic require-

ments. Although this service has been temporarily reduced from seven to four weekly trips, there is no decrease in space available for trans-Atlantic passengers due to the greater capacity of the new aircraft. The first North Stars to be used will be the DC-4M1's—the unpressurized cabin version. Later these will be replaced with pressurized DC-4M2's.

In the near future, a complete reorganization of our trans-Atlantic operations is due to take place. The C.G.T.A.S. is to be dissolved. In its place will be a TCA subsidiary probably known as Trans-Canada Atlantic Limited. Through this organization, TCA will assume full control of the Atlantic air services for Canada.

These are important times for TCA. The advent of the North Star doesn't signify our debut in international aviation. In this undertaking we have already laid the solid foundations on which to build for the future. But now we can celebrate our coming-of-age in the assembly of global airlines. We are ready to take a full part in trans-world air transportation.



SERVICE THIS AIRPLANE WITH GRADE
100/130 FUEL ONLY
DED 2475 AN-F-20 SPEC
GRAVITY AT 15 CO.71-0.73

LONDON BOUND!
Captain "Gil" McLaren, veteran TCA pilot with more than 12,300 flying hours logged, acknowledges the "all clear" signal before taking off on the inaugural North Star flight over the Atlantic from Montreal to London, England.

FOR AROMATICS

Between
OURSELVES

May, 1947





BETWEEN OURSELVES

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EDITOR—DON McLEOD ASSISTANT—AL CARLSON
WINNIPEG, MANITOBA

May Issue, 1947 No. 50

An Editorial for the Individual

It Isn't Someone Else's Aircraft

The North Star is the biggest thing ever to hit TCA. It is also the biggest thing ever to hit your job — and “big” doesn’t refer to wing span.

This aircraft, will strongly influence the future of the airline. Our time and our financial resources have been built into it. Our planning is based upon it. The security and well-being of each individual employee rides with it.

Fortunately, there is every reason to believe that it is a good aircraft — possibly even a great one. The men who have been closest to it believe this to be the case. The DC-4M1 should give us honest service and we expect even better from the DC4-M2.

But that is not the point. Even if it were the worst of aircraft, it would still be **our** aircraft and we cannot escape its responsibility.

Each of us has a personal stake in the North Star. It is with us today and no longer a subject for airy conjecture. It is solid, challenging reality. What we do with it now decides the health of this airline tomorrow.

The “North Star” **must** be filled with passengers — that’s the job of the individual traffic employee. It **must** operate efficiently and economically — that’s the job of the individual operational employee.

We are not obliged to do these things because it is in the interest of a “Management” or a “TCA” that (heaven help us!) we consider to be something independent of ourselves, but simply because it is very much in our own interests if we value our own futures — and also because we, as voluntary members of the airline, possess a social responsibility that we cannot honestly shirk.

The North Star is not someone else’s aircraft.

It is **your** aircraft. And that is not mere rhetoric.



OVER THE ATLANTIC

As scheduled, at 4:00 p.m. (Eastern Standard Time) on April 15, the North Star, TCA's new Queen of the Atlantic, its four mighty engines throbbing in anticipation, left the ramp at Dorval to begin its first trans-oceanic flight to Britain.

Aboard the aircraft were government members, business men, army officers, some officials of TCA travelling to obtain a first-hand view of the new operation and others en route to the United Kingdom and the Continent. In the flight compartment was an experienced TCA crew. The cargo compartments held a near-record mail load for the crossing, of over 600 pounds.

At 9:30 a.m. (E.S.T.) after making two, one-hour stops at Goose Bay and Prestwick, the big aircraft unloaded its passengers on the ramp at London Airport. It had completed its first Atlantic crossing as nonchalantly as if it had been flying this route for years.

TCA's newest and latest addition to its fleet, had been officially initiated into regular service.

Passengers on Historic Inaugural Flight

COUNT JEAN DE HAUTECLOQUE, French Ambassador to Canada.

COMMANDER C. P. EDWARDS, C.M.G., Deputy Minister of Transport.

LIEUTENANT COLONEL E. C. GARTHWAITE, from the Combined Operations School, British Army.

MAJOR L. L. MCGILL, also a member of the British Combined Operations School.

W. AITKEN, General Manager of the London Evening Standard.

MR. AND MRS. C. DEVRY of Mount Lehman, B.C.

JAMES HALL, Canadian representative of the Rolls-Royce Company.

D. A. PAGE, Assistant Manager of Mercury Mills.

W. A. McEVREL, Purchasing Manager and Technical Adviser of Mercury Mills.

H. C. KERMAN, Manager of Commercial Alcohols Limited of Montreal.

K. MYERS, of Oakland, New Zealand.

COLONEL R. M. SHEPHERD of the Canadian Army.

MRS. AGNES GATENBY and infant, of Chicago.

TCA representatives who were reviewing the operation

G. R. MCGREGOR, General Traffic Manager.

F. M. MCGREGOR, Operations Manager, Atlantic Region.

J. T. BAIN, Director of Engineering and Maintenance.

A. E. COLLATO, Passenger Service Supervisor, C.G.T.A.S.

M. A. JOHNSON, who is to be TCA's Station Manager in Iceland.

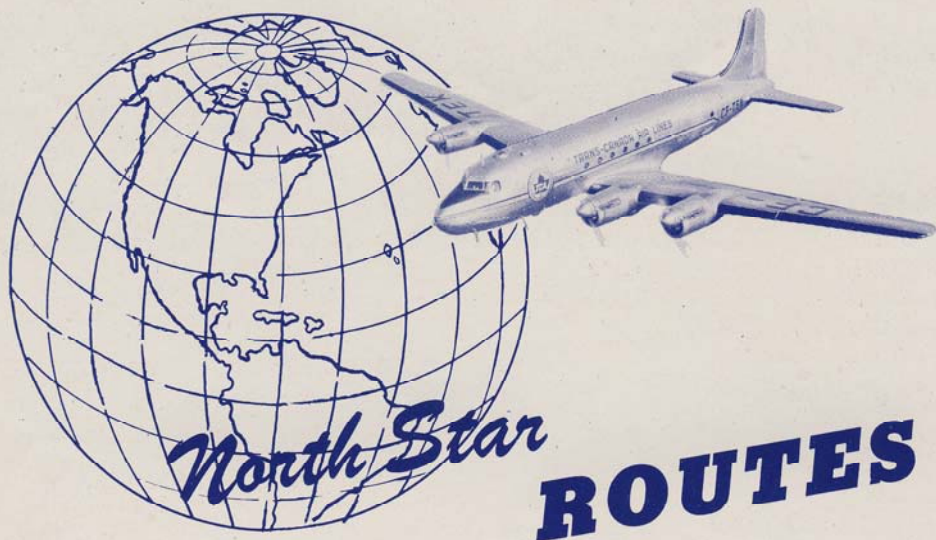


Above—Well-known figures in Canadian transportation gathered beside the North Star just before the aircraft began its first flight from Dorval to the United Kingdom. Left to right: G. S. Cowie, Assistant Treasurer, TCA; A. T. Cowley, Director of Air Services, Department of Transport; J. A. D. McCurdy, who made the first Canadian flight in 1909; W. S. Thompson, C.B.E., TCA Director of Public Relations; J. Schofield, O.B.E., Chief Architect, TCA; G. E. Bellerose, General Manager, TCA Express Services; S. H. May, Assistant Comptroller, TCA; W. H. Hobbs, Secretary, TCA; Hon. Wilfred Gagnon, C.B.E., TCA Director; N. B. Walton, C.B.E., Executive Vice-President of the Canadian National Railways; Commander C. P. Edwards, C.M.G., O.B.E., Deputy Minister of Transport; H. J. Symington, C.M.G., K.C., President of TCA; and T. H. Cooper, TCA Comptroller.

Below—The crew who flew the first North Star to Britain. Left to right: Navigating Officer H. T. Warrentin, Radio Officer A. J. Blackwood (Flight Radio Supervisor CGTAS), First Officer D. E. McInnes, Captain G. W. McLaren, Mr. Symington, Purser-Steward Douglas V. Miller, Captain J. L. Rood, Flight Operations Superintendent, CGTAS, who flew as check pilot on the flight.



Above—Count Jean de Hauteclouque, French Ambassador to Canada, signs TCA's passengers book at Dorval before leaving for the Continent as a passenger on the first North Star Atlantic flight.



ROUTES

1947 is the year that a new era begins in Canadian air transportation.

It is the year that TCA's North Stars take another substantial hitch in Canada's lengthy lines of communication. During the last decade this very thing has been happening with some regularity. New routes and a growing fleet have been continually drawing the nation's two coastlines closer together. But now the arrival of these new aircraft on the Canadian scene will cause travel times to shrink again — this time to a much greater extent than ever before. Industrial Montreal finds itself a scant eleven flying hours from Maritime Vancouver. Travellers may have late breakfast on Granville and dine that evening on St. Catherines Street. The North Stars bring our country's widely separated communities into a real proximity.

Just where will these huge North Stars display their flashing wings?

They are already rushing through the smooth sky over the Atlantic's turbulent waters. They are now in service on our trans-oceanic routes in place of the veteran Lancasters. On April 15, they began flying four weekly round trips between Montreal and London, England. During the summer, as traffic requirements dictate, these service frequencies may be increased to accommodate the seasonal flow of overseas passengers.

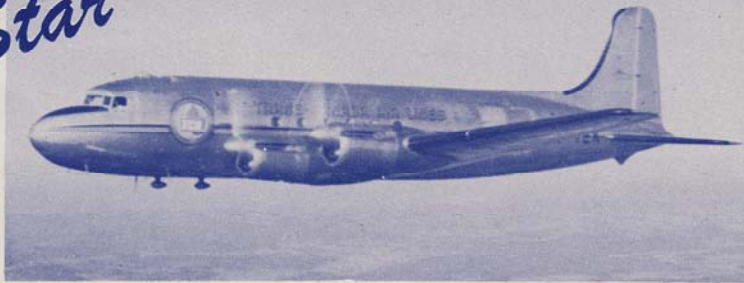
As far as domestic North Star services are concerned, it is too early to predict inauguration dates or eventual service frequencies. The first depends largely on the availability of the DC-4M1's and the latter on the delivery of the DC-4M2 pressurized aircraft. But it can be promised with reasonable assurance that by autumn, the mighty four-bladed propellers of the North Stars will be cutting a swath all the way from the Pacific seaboard, across the continent and over the Atlantic to London. At this time, the new aircraft will be flying at least one transcontinental run between Montreal and Vancouver. As more equipment comes into service, North Star transcontinentals will be increased and these aircraft will be seen on certain inter-city routes possessing good traffic potential. Then, of course, the commencement of the Bermuda flights will probably take place this year.

The DC-3's will maintain an intensive service on inter-city routes. They will also supplement, between Montreal and Alberta points, the North Star express transcontinental flights, stopping at intermediate points of call.

All this means that our timetables are in for some drastic revisions and a lot of reshuffling. But above all, it means a very busy year for the whole of TCA.

* * *

North Star



SPEED

Editor's Note: All North Star performance figures are for the DC-4M1 version. DC-4M2 statistics will be available at a later date.

ON DOMESTIC ROUTES

	North Star	DC-3
Montreal - Toronto (327 miles)—		
Westbound.....	1 hour 50 minutes	2 hours 20 minutes
Eastbound.....	1 hour 40 minutes	2 hours 5 minutes
Toronto - Winnipeg (1,014 miles)—		
Westbound.....	4 hours 45 minutes	7 hours 50 minutes
Eastbound.....	4 hours 10 minutes	6 hours 40 minutes
Winnipeg - Lethbridge (700 miles)—		
Westbound.....	3 hours 25 minutes	4 hours 55 minutes
Eastbound.....	3 hours	4 hours 10 minutes
Lethbridge - Vancouver (476 miles)—		
Westbound.....	2 hours 25 minutes	3 hours 5 minutes
Eastbound.....	2 hours 10 minutes	2 hours 35 minutes

OVER THE ATLANTIC

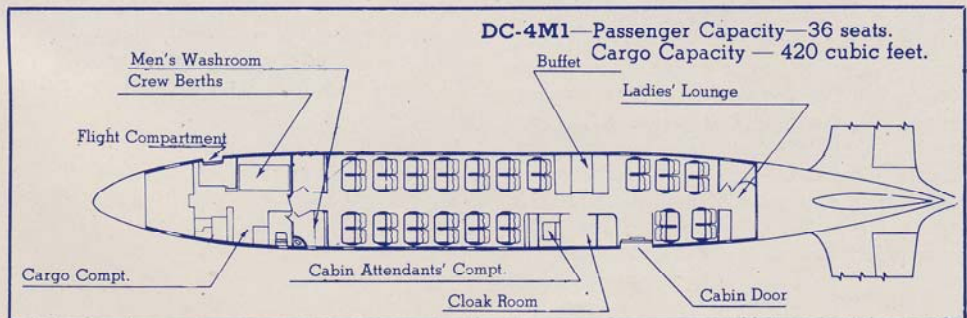
The North Star crosses the Atlantic between Montreal and London in scheduled times of 14 hours 15 minutes, on eastbound flights and 17 hours 30 minutes, westbound (against prevailing winds).

Maximum Cruise (11,500 ft., 2,650 r.p.m., 48 inches mercury manifold pressure)—286 mph.
 Maximum Cruise (25,500 ft., 2,850 r.p.m., 48 inches mercury manifold pressure)—325 mph.
 Rate of Climb (78,000 lb. gross weight — sea level)—980 f.p.m.
 Rate of Climb (10,000 ft.)—900 f.p.m.
 Rate of Climb (20,000 ft.)—550 f.p.m.

RANGE and LOAD

The North Star's (DC-4M1) range of 3,400 miles could carry it non-stop from Toronto to Prestwick, Scotland. This is a maximum range.

The aircraft has accommodation for 36 passengers and 4,000 pounds of mail and cargo. The payload will, of course, vary depending on the length of flights and on operational conditions. On domestic routes the North Star will carry nearly its full capacity. Over the Atlantic it will carry somewhat less.



North Star SIZE



Editor's Note: All North Star statistics given, are for the DC-4M1 version. As the M2's are still in the production stage, their data are not available at the present.

Passenger Capacity



North Star — 36

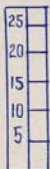


DC-3 — 21

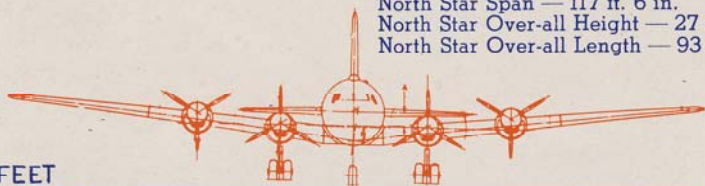


Lodestar — 14

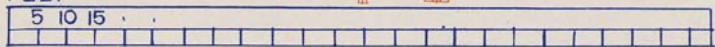
Comparison of Size



North Star Span — 117 ft. 6 in.
North Star Over-all Height — 27 ft. 6 in.
North Star Over-all Length — 93 ft. 5 in.



FEET



DC-3 Span — 95 ft.
DC-3 Over-all Height — 16 ft. 11 in.
DC-3 Over-all Length — 64 ft. 5 in.



Other North Star Statistics

Propeller Diameter	12 ft. 8 in.
Main Wheel Track	24 ft. 8 in.
Maximum Take-off Weight	78,000 lbs.
Operational Weight, Empty	50,500 lbs.
Zero Fuel Weight	58,500 lbs.
Maximum Fuel Capacity	3,002 gals. (Imperial)



Delivery Programme



The first five North Stars (unpressurized) have been delivered to TCA.

We may look for the first of the pressurized aircraft (DC-4M2's) about fall.

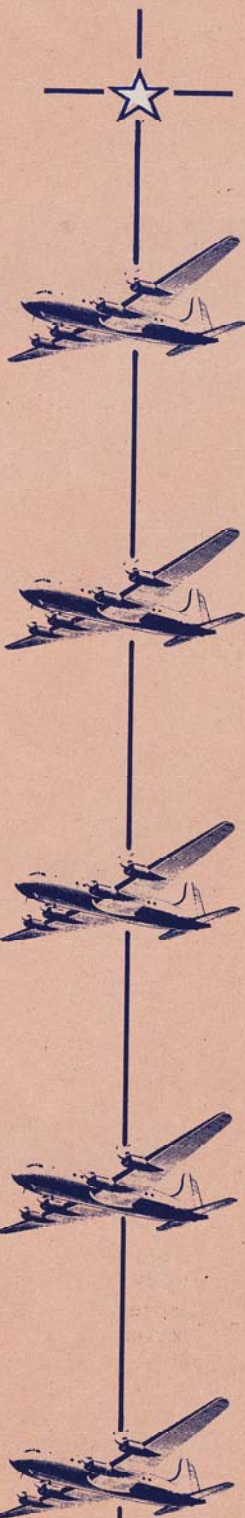
The remainder of the four-engine fleet should then follow in fairly rapid order, with the Canadair assembly-line moving under full momentum.

The M2's will probably enter service late this year.

Their Application

The DC-4M1's have gone to the trans-Atlantic service, replacing the Lancasters.

As additional North Stars become available (at first the M1's and then the M2's) they will gradually be assigned to transcontinental routes and to select inter-city services with high traffic potential. This will likely commence during the summer. Later they will be used to inaugurate the Bermuda route.





The North Stars' passengers will ride in roomy, comfortable and attractive surroundings.

THE North Stars are larger, faster and more powerful than any other aircraft that has yet worn the red TCA maple leaf. But they have other attributes that are equally as outstanding. Just glance inside one of them. You'll find provisions for travelling comfort that makes these aircraft rank among the best of modern airliners.

Interior arrangement figured prominently in the design of the North Star. A great deal of effort was expended in planning cabin accommodation that provided a high degree of physical and mental comfort for passengers and crew alike. Airline experience and research went into the selection of such important items as chairs, lighting and heating, decorating, dressing rooms and meal service. The materials used for seat upholstery, carpets, curtains, etc., were carefully selected for appearance, durability, weight and sound absorption characteristics. All these materials have been flame tested to meet CAA Fire Regulations. Color schemes were worked out to create a restful, warm and harmonious atmosphere. Emphasis has been placed on making contented passengers. Physical comfort is supplemented by psychological ease.

The two versions of the North Star, the DC-4M1 and the DC-4M2 (with pressurized cabin), are fundamentally similar in interior design. Each have unique double galley units for hot and cold meal service and beverage dispensing, a roomy coat room, dressing rooms, and facilities for crews to rest. Passenger chairs are constructed to eliminate fatigue

on the long flights these aircraft will make. They are individually reclineable and deeply upholstered. Ash trays are conveniently placed in the arm rests. The seats, in pairs, are placed by large windows. Individual reading lights are provided for each passenger. Furnishings are arranged to give ample leg room.

The crews who will fly the North Stars were not neglected when interior furnishings were being selected. All chairs in the flight compartment are also deeply upholstered and are shock-mounted to reduce vibration. They can be adjusted to provide correct vision for men ranging from 5 ft. 4 in. to 6 ft. 3 in. in height. Separate working desks are provided for the Radio Operator and the Navigator. On long flights crew members can rest in

Janet Lowe, TCA's Interior Accommodation Engineer, who selects the interior furnishings and colors for our aircraft.



folding bunks (2 in the M1), situated just behind the flight compartment.

Now for a closer inspection of the DC-4M1 and the DC-4M2.

The DC-4M1

The main cabin of the DC-4M1 is divided by the galley and the cloakroom into two sections. The forward compartment accommodates 26 passengers and the rear, 10 passengers. The main entrance door is in the aft section. There is a men's washroom at the forward end of the aircraft and a ladies' powder room at the rear. Hot, room temperature and drinking water is available. A cabin attendant's station, equipped with a panel containing light switches and call lights, phone and stowage space for items of passenger comfort, is provided to enable the stewardess to give efficient service to the passengers.

For the benefit of those with an eye for color, this is what the M1 looks like inside.

The carpet in the passenger cabin is rose beige in color. The lower sidewalls are covered with terra cotta brown plastic to simulate grained leather. Upper sidewalls and the baggage racks are chartreuse green gabardine fabric. The ceiling is cream beige in color. Partitions enclosing the coat room and galley are finished in golden yellow wood veneer.

Chairs in the forward section of the cabin are sand beige, striped with chartreuse and terra cotta — in the rear section they are covered in chartreuse with beige and terra cotta stripes.

Cabin curtains are chartreuse green with a plaid pattern in white.

The ladies' dressing room is decorated in clear grey blue and the men's in clear grey blue and terra cotta.

The DC-4M2

The DC-4M2 will differ considerably from the M1 in both cabin arrangement and color

design. This version of the North Star has a pressurized cabin which will add materially to passenger comfort. The entrance door on this aircraft is situated a little aft of the centre of the cabin. On entering, passengers will pass between the double galley units, directly ahead to the ample cloak room. The aisle running fore and aft between the galley and the cloak room leads to the forward cabin, seating 24 and to the aft cabin, seating 16.

Cabin windows are larger than in the M1 and are rectangular instead of circular. There is a cabin attendant's desk and double seat just forward of the coat room on the right side of the aircraft.

The ladies' powder room in the M2 has been made larger and has a curved lounge seat. The men's washroom, is slightly larger than that found in the M1.

The interior color scheme is also considerably altered in the M2. Sidewalls are light beige in color. Curtains are made of beige Canadian handwoven material with a maple leaf worked into the colored border pattern. Coat room drapes are also of this original design. The upholstery on chairs is changed to a bright green pebble tweed material and is the same on all seats. In the washrooms, soft grey in the M2 replaces the light blue in the M1.

North Star passengers will be whisked across oceans and continents in spacious comfort and attractive surroundings. TCA can well afford to let its chest swell with pride — just a bit — when our new four-engined equipment roars overhead.

Below—The spacious and well appointed passenger cabin of the North Star.

Left—Passenger service on the North Stars reaches new heights in catering to the traveler's comfort. On Trans-Atlantic runs, cocktails are served in addition to the usual hot and cold meal, and beverage service.



The North Star



Some New Features In Design

WHAT'S new about these North Stars that are being added to TCA's fleet? Most of us know that the union of the Merlin engine and the Douglas airframe is a new and significant departure in aircraft design. But that doesn't finish the story.

When the blueprints for this aircraft were being drawn, the shadows of three important groups of people hovered over the draughting tables — the mechanics, the pilots and the passengers. The new aircraft was required to provide passengers with the best in comfort and travelling satisfaction. But it was to be a pilot's aircraft too — pleasant and comfortable to fly and equipped with the latest developments in flying aids. To no less a degree was the technician's viewpoint considered. In spite of its complex structure, the aircraft was to be as easy as possible to maintain and service.

In endeavouring to meet these exacting requirements, the engineers evolved some new aeronautical wrinkles for the DC-4M's.

As far as the North Star is concerned, gone are the days when an engine change means the loss of many flying hours while the aircraft sits on the ground. By the relocation of engine accessories, and the simplification of drives and attachments on the Merlin engine, an engine change can be completed in 15 minutes.

This new idea of "unit construction" is carried on as much as possible throughout the entire aircraft. This promotes easier maintenance, more rapid servicing and thus, an increased rate of aircraft utilization.

The North Star approaches very close to the pilots' "ideal aircraft." And it should too, because our pilots had a hand in the design of

**Our North Stars Can Take Pride
In Some Important Innovations.**

the mock-ups from which this aircraft grew. The cockpit arrangement, a very important consideration from a pilot's viewpoint, is efficient to the "nth degree." The multitude of controls have been carefully situated in easy reach of the flight crew. Instruments are grouped for easy reading. On the flight deck, there are only five levers for operating the power plants, in place of 24 usually found in four-engined aircraft. The pilot has to handle only four throttles (one for each engine) and a master propeller control that automatically synchronizes the engines. Some of the controls, like those for engine temperature and fuel mixture adjustment have become fully automatic. Everything possible has been done to make the pilot's exacting job a little easier to perform — instead of manipulating levers, he can direct most of his energy toward smooth, dependable flying.

The North Star differs in many more ways from its parent design. In this aircraft, very extensive use is made of electrical and electronic equipment and consequently the electrical system had to be redesigned to handle the increased loads. The additional power and speed that the Merlins give to the aircraft, necessitated several structural changes to give greater strength. Radio installations are new, with racks built for interchangeability and quick servicing. An entirely new brake system and re-adapted air conditioning are other modifications incorporated in this aircraft.