

## COMET AIRLINER STARTING SHAKEDOWN FLIGHT TRIALS

By Floyd S. Chalmers

LONDON — We went out to the de Havilland plant the morning after the Comet's amazing six-hour hop to Castle Benito, Libya and back, an aerial triumph that made headlines the world over. Workmen were busy stripping the world's first jet airliner of engines and instruments for examination.

The Comet is a neat looking job. It will seat 36 passengers. Its normal cruising speed is 500 mph, but to achieve maximum fuel economy at that speed it must fly at 40,000 feet. Obviously this is no plane for short distances. Flying to Africa it took roughly half an hour, or around 150 miles, to reach that height.

### Questions To Be Answered

This first Comet will be kept flying under all sorts of conditions for the next year to work out many problems. What is the weather like at 40,000 feet? What happens to pressurization (which has to be two and a half times the pressurization of the ordinary transatlantic airliner)? What happens when one runs into headwinds of 150 mph, which are frequent at that height? Is it better to make a quick ascent to the top level or to take it slowly? What is the best speed at which to fly?

In addition to these and a thousand other technical questions that must be answered, de Havilland has to determine from actual experience the answer to the key question of the optimum range of the Comet. Obviously, it is uneconomical for the shorter hops for which Canada's Avro jetliner is designed. But is it a 2,000-mile machine or a 3,000-mile machine or something in between? If it is a 2,000-mile machine then it is not for North Atlantic flights; at 3,000 miles it might tackle London to Gander nonstop, cutting out one stop.

At the de Havilland plant a second

Comet was nearing completion. It also is for test flying. But work is well advanced on the first four planes ordered by BOAC.

There was a good deal of venture-some courage in the placing of the order by BOAC for 14 of these airliners. De Havilland itself financed the design and development. The British Government ordered the first two to be built. BOAC bought the

Note—As guests of the British Board of Trade, a group of six business paper publishers and editors has been touring factories in the United Kingdom. Floyd S. Chalmers, vice-president and general manager of the Maclean-Hunter Publishing Company and R. Eric Crawford, editor of Canadian Machinery, members of this group, have sent special reports to Canadian Aviation, herewith.

—The Editor

## WILL THEY PASS UP PRESTWICK?

By R. Eric Crawford

PRESTWICK — Scotland is up in arms; there is said to be a plot on foot to bypass Prestwick Airport on transatlantic flights and come down at London Airport (Heathrow) direct. The Scots fear that they will lose that part of the business — and prestige — just as has happened with shipping. Cunard and White Star, they tell me, no longer dock at Glasgow; it's all Southampton. Scotland will become a province of England.

Building of the runway for the Brabazon at Bristol suggests an alternate landing field there, and adds fuel to the fire of suspicion that London is trying to hog everything.

One advantage Prestwick will long

next 14 off the drawing board. But with a guarantee as to cost, date of delivery and performance. When these have been delivered any one else may buy them.

To a layman the time between conception and first commercial flight of an airliner seems incredibly long. It is three years since de Havilland began to blueprint the Comet. It will be another three years before the first completed planes will be delivered to BOAC. Even at that de Havilland is certain that it will be years ahead of any other jet airliner of comparable range. That it is guessing right seems to be indicated by the enquiries flooding in from the world's airlines.

### For Many Countries

De Havilland also is making the Dove (for short range commercial flying), the Mosquito (still the best night fighter), and the Chipmunk. The latter is the training machine designed in toto by a Canadian design team. It is being made in Canada for export to dollar countries, in Britain for sterling countries.

How dependent a large part of the world is on the British aircraft industry was indicated forcefully by the work in progress on the floor when I was at the Hatfield plant. Planes were being readied for shipment to Sweden, Norway, Switzerland, France, the UK, South Africa, India and two other countries which prefer to remain unnamed. The Dove alone has already been delivered to 31 different countries and one a day is coming off the production line.

enjoy; it is the most fog-free spot, the year round, in Great Britain. Our flight landed there in beautiful sunshine. Ten minutes after taking off we were in clouds right up to the 9,000-ft. flying level and had to come in at London on GCA. We were number five on the stack and had to circle over London nearly 50 minutes, which could be a problem at the end of a transatlantic flight. We came down in a downpour.

U. S. planes are not allowed to use GCA — perhaps because they haven't yet proved it was invented in U. S. — so have to cruise aloft till they find a hole in the clouds. There were two hanging around aloft when we landed.