

Magic Carpet

VOL. 8, No. 6

STAFF MAGAZINE OF AIR-INDIA

SEPTEMBER-OCTOBER 1964

PRESIDENT OF INDIA TRAVELS ON OUR SERVICE

From the **CM's desk**



The President of India greets our crew at Palam Airport in New Delhi before the take off. Our AGM is on the right.

MR. KANUNGO HEADS AVIATION MINISTRY



FOR the first time since Independence we have a full-fledged Ministry of Civil Aviation. Mr. Nityanand Kanungo, former Minister of Industry, is the new Minister of Civil Aviation.

Mr. Kanungo, who has travelled extensively in the U.S., Europe and South East Asia,

brings to his Ministry considerable administrative experience and knowledge of commerce and industry.

Born in Cuttack on May 4, 1900, Mr. Kanungo was educated at Ravenshaw College, Cuttack, and University College, Calcutta. He has held public office since 1937, first with the Government of Orissa and later with the Government of India.

Mr. Kanungo was a member of the Indian Delegation to the International Labour Conference held in San Francisco in 1948. He also led the Indian Delegation to the International Rice Conference at Jakarta in 1951. Mr. Kanungo was Chairman of the Textile Enquiry Committee in 1952.

Since 1954, he has been with the Central Government first as Dy. Minister for Commerce and Industry and later as Minister of Industries and Minister of Commerce. He returned to the Ministry of Industry in April 1962 and remained there until his present appointment as Minister of Civil Aviation.

DR. S. Radhakrishnan, President of India, returned to Delhi on our Boeing 707 EVEREST on Sept. 27, 1964, after State Visits to the U.S.S.R. and Ireland.

The President travelled to Moscow and London by MAKALU, our latest and newest Boeing 707-320B intercontinental jet, which introduced a new colour scheme—a soft, soothing shade of lilac—to the route of the Magic Carpet.

Designed by our Art Studio, the richly decorated panels worked in white and gold to give the rich effect of Banaras brocade, provide a distinctive Indian touch to the quiet, spacious cabin. The motifs of well-known birds and animals of India are set against the backdrop of intricate Moghul-style floral patterns.

The bulkhead partitions carry a mural painted in Rajasthani style showing a festive procession. The window panels depict various ancient modes of transport used in India through the ages and some of the outstanding examples of Indian sculpture.

(Contd. on page 4)

FASTEST TO LONDON VIA MOSCOW

Our new route to London via Moscow inaugurated on October 2, 1964, cuts down the flying time between Delhi and London by approximately 4 hours. The service—fastest between India and the U.K.—will cover the distance between the two countries in 11 hrs. 15 minutes.

The service will leave Delhi for London via Moscow on Tuesdays and Fridays and will return to Delhi on Wednesdays and Saturdays.

AS you know, we have been operating a daily frequency to New York during summer months which is being reduced to a frequency of 4 times a week during winter months between New York and London. We have been pressing for a daily service throughout the year and now anticipate that this will be agreed to from the current winter.

The fact that we had to cut down frequencies during winter months from a daily to 4 times a week had serious adverse effects on our revenues. The situation became further aggravated with the shift in the pattern of travel on the Atlantic during the current year. There used to be an overwhelming preference for week-end travel which has now practically disappeared, and so lack of operation on 3 week days would and did become a serious sales deterrent. I am happy that our problems have been appreciated and we would now be able to operate on the sector London/New York without a cut back during the winter months.

Up to now India/UK has been our blue ribbon route ever since we started international operations in 1948. I hope that from now on India/USA will be our blue ribbon route. There will be a daily service on this route and the additional services, like the flight through Moscow, will terminate in London. On the return journey, however, these services will connect with the daily service from New York to London and we shall thus be providing the fastest service between New York and Delhi via Moscow with the fewest enroute stops, viz., London and Moscow.

B. R. Patel

(B. R. PATEL)

Looking for the Magic in Air-India's Carpet

BY JOHN SEEKINGS

In 1961 Air-India was one of the very few international airlines to report a profit; and recently it reported a record operating profit of £3m for 1963-64. This exceptional record has been analysed in the May issue of the airline's house journal, "Magic Carpet," by Mr B. R. Patel, the deputy chairman and general manager. In particular Mr Patel disputes the notion that Air-India's financial soundness has been due to "American rates of income and Indian rates of expenditure." In these pages is an independent analysis.

A FEW months ago I happened to be reading through an airline profile on Air-India (*Flight International*, December 26, 1963) when my eye chanced on what seemed a remarkable statement: "Air-India's break-even load factor . . . is about 40 per cent." Being the victim of an unsatiable curiosity when it comes to the problem of making air transport profitable, I immediately recognized that this achievement was worthy of more than a passing reference.

To start my inquiry I turned to the recently issued ICAO Financial Digest for 1962 only to find that no data are given for break-even levels. However, a little slide ruling revealed that the break-even figure for the industry as a whole in 1962 was 52 per cent—no less than 13 points higher than the Air-India equivalent which actually worked out at 39 per cent.

Having established that my first suppositions were correct, the next logical step was to make a quick comparison with similar carriers. The most obvious choice was Qantas, an airline operating over much the same routes with the same equipment. Somewhat to my surprise, I found that the equivalent figure for QEA—although below the industry average—was at 48 per cent well above that for Air-India. Another superficial line of comparison was with those airlines which enjoy a relatively low wage economy. Again putting my slide rule into action I found that Middle East Airlines, which enjoys in addition an above-average level of fares, showed a figure of 47 per cent. Japan Air Lines, probably the most comparable carrier, worked out as high as 60 per cent. Thus it seemed that while a low wage level must be a factor, it did not appear to be the dominant factor.

At this stage it seemed appropriate to check whether the 1962 results were typical. Fortunately, Air-India has published a very comprehensive account of its affairs each year since nationalization just over ten years ago. These accounts make it possible to calculate break-even figures which can be compared with global figures obtainable from ICAO data. From this comparison the significant fact emerged that Air-India's relatively low break-even load factor is a recent phenomenon, dating only from the acquisition of jet equipment. During the 'fifties, when Air-India was operating with L.749s and Super Connies, its break-even level stood consistently but only fractionally below the industry average (which fluctuated between 55 and 60 per cent). In subsequent years, however, while the global figure has approached 50 per cent, Air-India has beaten

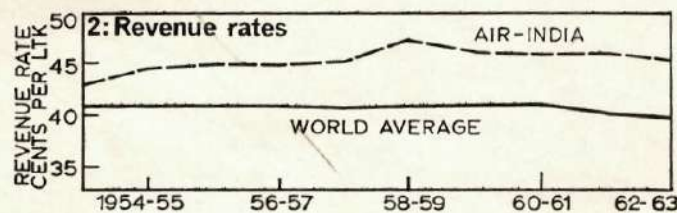
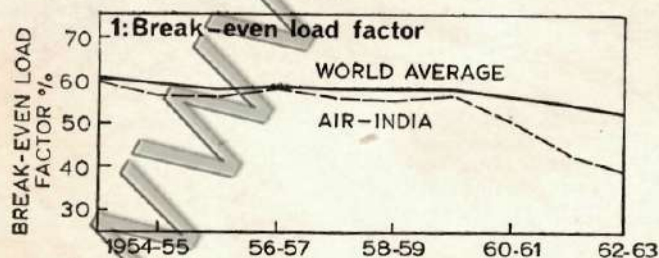


40 per cent. This evidence also seemed to throw doubt on the low wage theory; for the low wage airline, were this theory valid, would have shown up better in the propeller era when aircraft were more hungry consumers of man-hours than are the highly efficient and labour-saving flying machines of today.

Having established that Air-India's low break-even level was of recent origin, the next stage was to isolate whether this was brought about by high revenue yield or low unit cost. Taking again the decade 1953 to 1962, Air-India has consistently showed an above-average revenue yield, this being largely due to depression of the world average by the weight of low rated US domestic traffic. Although this gap has tended over the period to widen, there has been no significant widening over the past three years. Thus it seemed that although this factor was instrumental in keeping Air-India's break-even figure down it could not account for the remarkable reduction in recent years.

Turning next to cost data a significant clue immediately became evident: whereas Air-India's cost level in the 'fifties was relatively high (fluctuating around 26 cents per available tonne kilometre as against an industry average which ranged between 23 and 24 cents per a.t.k.), the 'sixties have seen the Indian carrier reduce its unit costs well below the world average. Because of variations in foreign exchange rates, conversion into a common currency must necessarily involve an element of conjecture. Nevertheless, it is clear from any comparison that Air-India, which was a relatively high cost piston operator, is now about the lowest cost jet operator.

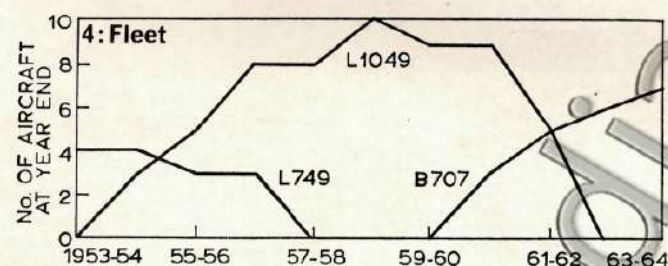
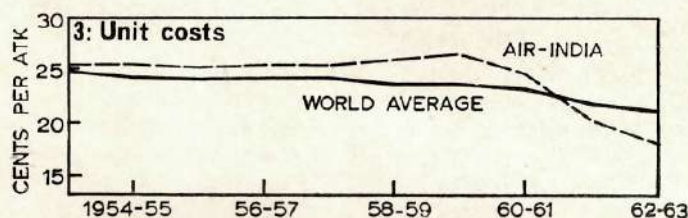
To reach this stage of the inquiry it had been possible to rely on the published records. To carry the exercise further, however, would call for personal interrogation. As luck would have it, I chanced to be travelling East shortly afterwards and so was able to pursue the search in Bombay. Obviously the first item to check was the effect of relatively low wages (the payroll accounts for only one-fifth of Air-India's total expenses and the average employee earns the equivalent of only about £600 a year). However, on closer inspection it was difficult to see how this could account for the recent reduction in unit cost. Most noticeably, wage inflation has been a prominent feature of the Indian economy during the past few years, particularly in skilled grades in the main centres such as Bombay. Less noticeable, but perhaps of even greater significance, is the relatively low productivity of Indian labour. Although the prejudiced Westerner might see this with a critical eye, those with experience



of the less developed countries realize that low productivity (by Western standards) is an inescapable feature of an economy which suffers from unemployment and underemployment. It would be no exaggeration indeed to say that in countries such as India there is a social compulsion to employ as many people as possible. Yet another factor is that Air-India, being a relatively small airline, tends to contract out more work than is usual among international airlines. Until their fine new engine overhaul base was completed, for instance, their Conway engines were all shipped to the UK for overhaul. Even now, most of their ground handling abroad is subcontracted. For this reason the labour cost statistics can be very misleading. In any case, there appears to be no reason why the recent reduction in costs should be attributed to wage levels.

The next most obvious factor was the airline's concentration on a single aircraft type. On looking at Air-India's costs in detail it is clear that the items which are noticeably low—crew costs and engineering—are precisely those which are unfavourably influenced by a proliferation of aircraft types. Yet the fact remains that Air-India has always been a one-type operator. Although this must exert a downward influence on costs, it clearly cannot account for the sharp recent reduction.

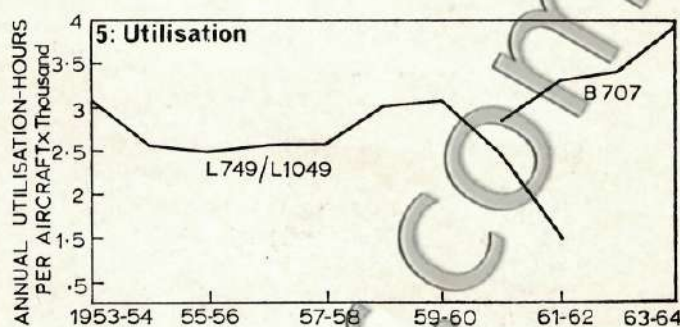
Another apparently favourable factor is the pattern of operations which is predominantly long-haul. With an average sector distance of 1,500 miles, Air-India is able to exploit the 707 to the full. A further operational advantage is the unusually even flow of traffic



throughout the year, this being largely due to the Indian tourist season reaching its peak in the northern winter. Another favourable feature of the route pattern is that Air-India, being based more or less half way down the main trunk routes linking Europe and the Pacific, tends to carry a lowish proportion of the very low yielding ultra-long-haul traffic. By the same token, it carries a high proportion of traffic on the routes between India and the Eastern Mediterranean where fares are among the world's highest.

Not all the characteristics of the route pattern are favourable. Clearly, the volume of operations is very low in relation to the scattered network. Indeed, when measured in such conventional terms as average annual output per station or average weekly frequency per service, Air-India might be suspected of being a high cost airline. Similarly, the severity of competition—it is not unusual for Air-India to face eight or nine rivals on its services—is such that selling costs are unusually high. Taking all these aspects of the route pattern together it is obvious that the overall picture is favourable. As with labour costs and aircraft type, however, there is no clue here as to the reason for the recent cost reduction.

Having eliminated the obvious items from the list, the next step in the inquiry was to sit down and work out the various indices of efficiency which might provide the explanation. After a little more slide ruling a set of figures emerged on such aspects as staff productivity, aircraft utilization and route density, but all these showed the same picture, no dramatic recent change, only a steady continuous improvement. Then, almost by chance, a set of figures took shape which bore an uncanny relationship to the cost curve—the scale of

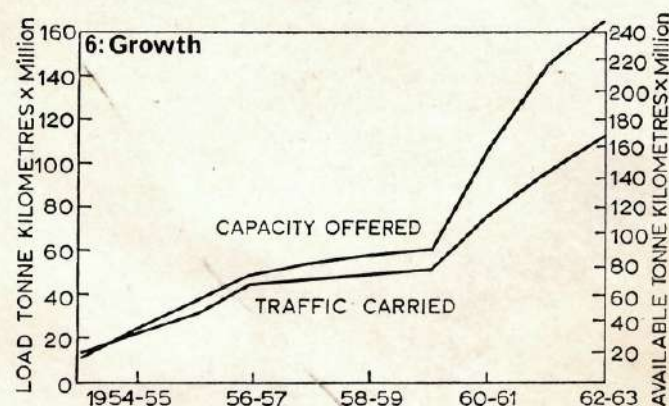


operations, which had flattened off in the latter Super Connie years, jumped ahead smartly with the arrival of the 707s. This recent growth has continued and as a result the airline has more than doubled its size over the past three years.

Although it is notoriously difficult to evaluate the economies of large scale, or for that matter the diseconomies of small scale, it is clear that the modest scale of Air-India's operations during the Super Connie era did not allow the airline to make the most of that aircraft. During the early period of 707 operation the same problem still persisted for a fleet of three aircraft was bound to be uneconomic in various obvious respects. However, the 707 fleet was quickly expanded and now with a fleet of seven aircraft it is difficult to see any significant remaining diseconomies of small scale. Indeed, Air-India is now probably one of the fortunate few which are big enough to avoid the diseconomies of small scale and yet are still small enough to avoid the equally disconcerting difficulties of excessively large scale.

Here, without doubt, appeared to be the main reason why Air-India has achieved such remarkable results during the past few years; for the first time in its history it was of a sufficient size to allow full exploitation of its other natural advantages such as long average haul and a single aircraft type. It now seemed that the only remaining question was whether or not this development had come about as an act of deliberate policy. From all sides the answer was emphatic affirmative; convincing documentary proof was even produced in the form of an internal report prepared in 1958, by a special committee of senior executives, which set out the need for a larger Boeing operation than the three aircraft then on order would allow. But perhaps the most significant feature of this final stage of the inquiry was the insight it provided into the background of Air-India finance.

Most airlines pay lip service to the ideal of viability. Air-India, by contrast, is committed unreservedly to the making of profits. This is not through some glittering vision of Oriental avarice, but because of the realization that Air-India cannot develop successfully unless it develops profitably. As a State-owned enterprise, it is of paramount importance for Air-India to retain the utmost confidence of the Indian Government; this means that the airline must succeed in presenting a favourable image abroad without imposing a burden on the nation's stretched financial resources. By operating at a profit, by maintaining an excellent record as a net earner of foreign exchange and by relying to the least possible extent on State aid for financing new equipment, Air-India has never had to suffer the degradation of outside interference. This independence has, of course, been a vital factor in preserving the airline's high morale.



(Contd. on page 11)

the things the chairman says!

We must exercise some control over hostesses' hair styling. While I am all in favour of some variety and allowing the girls some latitude, we must keep to some accepted criteria. I understand that in regard to hair that is worn loose and not piled up or worn in a bun, our present ruling is that the length of the hair must be below the ears and above the shoulders.

We must tighten up on this last requirement as hair that remains just above the shoulder can in fact be far too long, particularly if the girl has a long neck.

Miss...is a case in point. While she meets our requirements, her hair is so voluminous and hangs so long that when she bends forward her face literally disappears in it. She is otherwise a good and attractive hostess.

I have noticed from time to time other cases of rather untidy hair-do's amongst our hostesses. The necessary directive may be given to the Chief Air Hostess.

From time to time, we seem to be getting lax about the weight of our hostesses. With the short choli of our saree uniform, it is important that hostesses should remain trim, as any fat around the waist becomes clearly visible and is exaggerated into an unsightly roll when the hostess bends down while attending to passengers.

On a recent flight from Geneva I noticed that Miss...displayed an amount of fat around the waist which went far beyond acceptable limits and was in fact a source of amusement to passengers.

To make things worse, she let her palav hang loosely from her shoulder, so that practically her whole waist, back and front, was exhibited. I had to tell her to drape her palav around her waist.

If at times we are short of hostesses and cannot automatically ground overweight ones, they should at least be instructed to drape their sarees around their waist so as to hide their bare midriffs!

While on the subject of draping sarees, whereas I understood hostesses to have been instructed when serving meals or drinks to pin the front of their sarees to the left hip, and to tuck in the end of the palav, after bringing it around from the back, into the waist band above the left hip, some of the hostesses nowadays tuck the palav into the waist band at the back where it hangs in an untidy loop or, worse still, some of them wrap it around their neck: This is the way most...hostesses wear their sarees, but it is not in keeping with our standards and must be stopped at once.

(If people say kind things about our inflight service—now you know why. If other Chairmen are as observant as ours is, we'd welcome excerpts from their flight reports! Ed.)

* This blank refers to another airline.

JULIE DUNNE APPOINTED CHIEF AIR HOSTESS

CHIC and petite, with a twinkle in her eye and spring in her step, Julie Dunne, our new Chief Air Hostess, is every inch an air hostess.

Born in Darjeeling, Julie is second of five children. She has a deep-seated love for adventure and a yen for travelling. Nothing pleases her more than to be constantly on the move, see places and meet people. "There should be at least one gypsy in every family", she added with a chuckle.

Julie did her Senior Cambridge in Darjeeling and, curiously enough, gave up all thoughts of higher education. Instead she joined a commercial institute in Calcutta and took up a secretarial course.

It was here that at the suggestion of a friend, she sent an application to Air-India for an air hostess' job. To her surprise she was called for an interview and after a brief spell of training, launched on an adventurous career; and became Asst. Chief Air Hostess in 1962.

Julie finds her job very exciting. She says that it always holds a promise of something new, something interesting and there is never a dull moment. Her *savoir-vivre* and friendly

nature make her at home everywhere and stranger nowhere.

About her duties, she has nothing to complain. "Once you love your work, it becomes automatically easy. And though the passengers sometimes become difficult, a little patience, a little understanding and a kindly word seldom fails to sort things out", says Julie.

She likes elderly passengers—they are always co-operative and appreciative and soon treat her like their own daughter. (Wolves beware!)

Julie has seen almost every country in the world but cannot say which of them she likes most, though she rates Beirut and Nairobi as her favourite cities.

According to Julie, an Indian air hostess receives the same respect and consideration as all Indian women do. People all over the world are nice and understanding, though they never understand how one can "twist" in a sari!

Next to flying, Julie loves sports. She is fond of riding



JULIE DUNNE

and plays hockey extremely well. "Before I saw the wide world, I travelled all over India as a member of my State Hockey Team — though on wheels and not on wings", she added. Lately she has taken to bowling as one of her favourite sports.

While in school, she was also fond of drawing. She once received a prize from the Children's Art Academy of London. It is still one of her most treasured possessions.

President's Flight

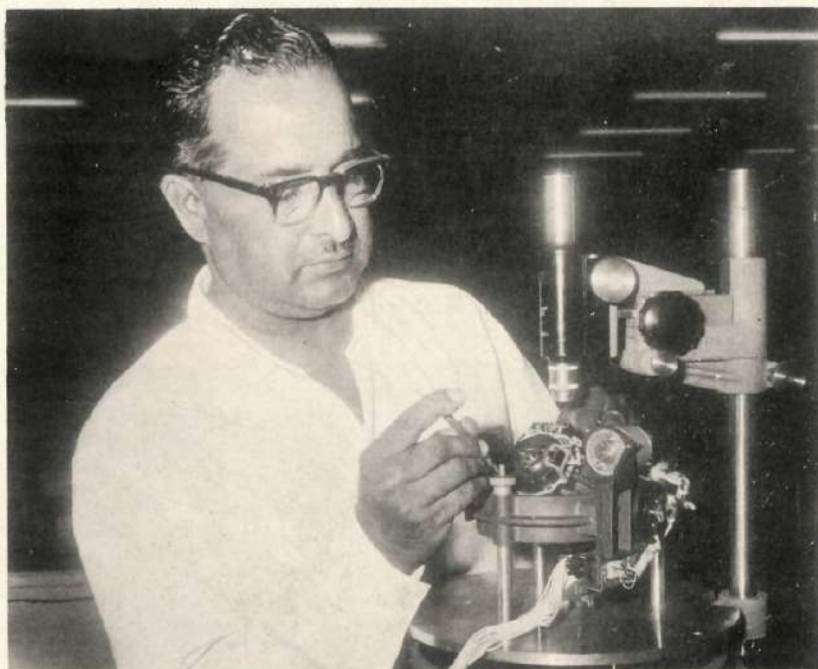
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Amongst these are sculptures from the famed Elephanta Caves, Khajuraho and Konarak.

Mr. K. K. Unni, our A.G.M. accompanied the President from Delhi to Moscow on Sept. 11, 1964. Capt. K. Vishvanath, Director of Operations, was on board the President's Flight from Moscow to London on Sept. 18, 1964. Mr. M.A.S. Da'al, our RM-UK, accompanied the President on his return flight from London to Delhi.

Capt. V. N. Shirodkar, Divisional Operations Manager (Central Division), was in command on the Delhi-Moscow and Moscow-London sectors with Capt. S. R. Das as First Officer. Capt. D. Bose was on board as an additional Commander on the Moscow-London sector.

Capt. R. V. Goday commanded the return flight with Capt. P. H. N. Katrak as First Officer from London to Cairo. On Cairo-Delhi sector, Capt. S. C. Maulik was assisted by Capt. K. N. M. Nambiar.



Pappu Odakayi setting the electrical zero reference of the vertical gyro to make it laterally correct.

OF MOTORS GYROS AND RADAR

AIR-INDIA'S Boeing 707 intercontinental jet is sleek and graceful, yet big and powerful. Inside its spacious cabin all is serene. There is no vibration.

Madhav Kolhatkar, Deputy Superintendent, Instrument Shop, watching Uttam Naik adjusting a vertical gyro. Kolhatkar, 45, joined Tata Airlines in October 1940 as an apprentice.

But behind the smooth and streamlined exterior, the giant airliner is a maze of electrical, electronic, hydraulic and mechanical gadgets. Its flight deck is a jigsaw puzzle of instruments, switches, knobs and levers beyond the ken of a layman.

Its electrical system — the nervous system of the Boeing — has nearly 40 miles of wiring and produces 120 kilowatts of power, enough to light a small town. Its elaborate air conditioning system is so efficient that it pumps 3,210 cubic feet of pressurised fresh air into the cabin every minute, maintains the cabin temperature at a comfortable 70°F while outside it may be 40°F below zero.

Its automatic pilot is an electronic marvel. It can fly the aircraft with a precision impossible for a human pilot to match. Its flight director can lock on to a radio beam and guide the pilot to a virtual blind landing. Its weather radar scans the sky for 150 miles ahead to detect storm clouds and warn the pilot.

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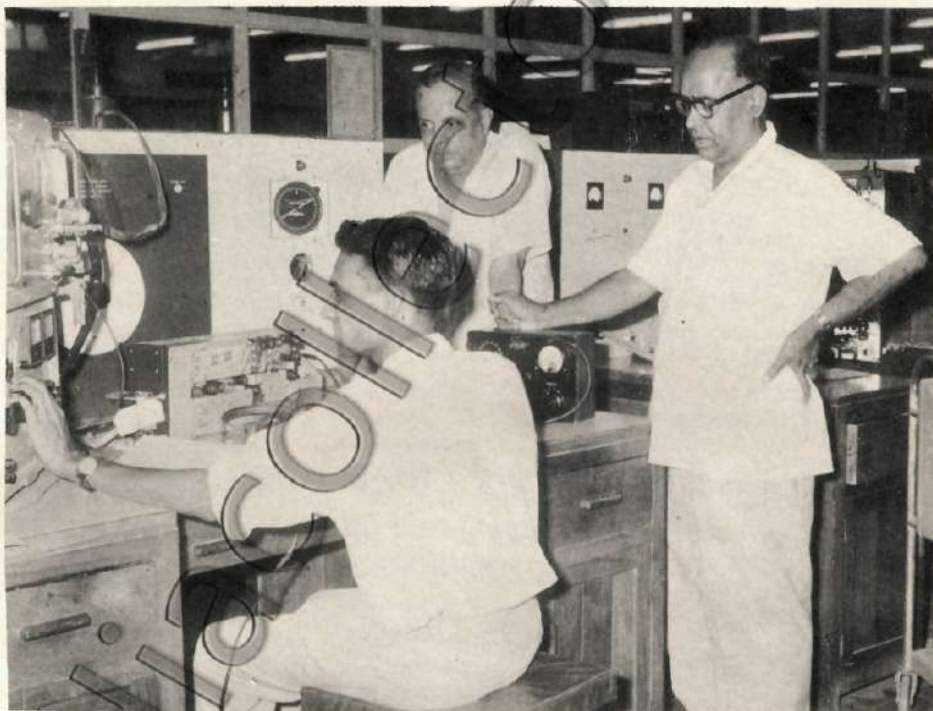




Balwant Shitut, Inspector in charge of the Instrument Section, testing electronic cards used in the auto pilot overhaul and repair, was trained at the Bendix Co. in U.S.A.

Ancillary

The alignment of the Automatic Direction Finder receiver appears to be requiring expert attention. Advising Ernest John are Vasant Hattangady (Standing, left), Deputy Superintendent, Radio Section and Ramnath, Inspector-In-Charge. Hattangady, 50, an engineering graduate from Madras University, trained as a Radio Engineer at the Marconi College of Wireless, U.K.



(Contd. from page 5)

Perhaps the most remarkable feature of these systems and equipment, apart from their complexity, is their ability to function with equal efficiency under widely differing conditions of heat, cold and rain. Such reliability in performance not only demands a sound basic design but also exceptionally high standards of maintenance and overhaul. The overhaul of ancillary equipment and systems, therefore, forms an important part of airline engineering.

ANCILLARY OVERHAUL DIVISION

Air-India has a separate Ancillary Overhaul Division as part of its engineering complex at Santa Cruz Airport, Bombay. Located on the second floor of the annexe to the Maintenance Hangar, the Division comprises the Electrical, Instrument and Radio workshops under the overall charge of Joe Sequeira, who has three Deputy Superintendents Jal Wadia (Electrical), Madhav Kolhatkar (Instruments) and Vasant Hattangady (Radio). Between them they look after individual workshops. The Division has a staff of 210, including 20 inspectors.

ELECTRICAL SECTION

The Boeing requires the power output of a small power house to operate its systems, many of

which either depend solely upon electrical power or use it as auxillary. Four tiny generators fitted on to each of the four engines generate 30 KW of power each at 200 volts 400 cycles and feed it to a single distribution point, from where it is carried to various parts of the plane for functions which may include anything from operating a thimble-sized motor in an instrument to moving the giant horizontal stabilizer, from heating meals for over 130 passengers to operating the fuel sensing system and providing lighting for the whole aircraft.

The Electrical Shop handles about 700 major units each month with literally hundreds of motors, regulators, relays and switches. Elaborate and highly sophisticated test rigs have been designed and built by Air-India's technicians to test these units to rigid performance standards under simulated flight conditions.

For instance, to test the turbo compressor, which provides air for pressurization and air conditioning, six 100 h.p. commercial compressors have been installed.

Kamlakar Patkar adjusting a Flight Recorder after c



Overhaul Division



Sharad Deshpande overhauling a pump of the Constant Speed Drive which helps generators to maintain a steady 6,000 revolutions per minute.

But even this volume of highly compressed air has to be heated to 700°F before it has energy enough to run the 100 lb. unit at the required 47,000 revolutions per minute during tests.

Equally elaborate arrangements have been made to check the air conditioning system, the generators, voltage regulators and the Constant Speed Drive Unit which helps the generators to maintain a steady 6,000 revolutions per minute under varying conditions.

INSTRUMENT SECTION

To a layman, the serried rows of instruments on the flight deck of a Boeing 707 is bewildering; to a pilot their very sight is reassuring; but to a technician working in Air-India's Instrument Shop, each one is a fascinating puzzle of delicate mechanism.

The Shop overhauls, repairs and tests some 6,000 to 7,000 instruments a year. Some of these instruments have parts so tiny that the technician must work with an eye glass. Others are so delicate that their movements must be correct within a thousandth of an inch and special test instruments are required to achieve the desired accuracy.

Take, for instance, the Gyroscopic instruments such as the Compass, Vertical Gyro and the Flight Director. The compass and the Vertical Gyro indicate the roll and the pitch movement of the aircraft and the Flight Director helps the pilot to fly any desired path with the help of ground based radio aids. The repair and overhaul of these precision instruments require consummate skill and workmanship.

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JOE SEQUEIRA A Profile

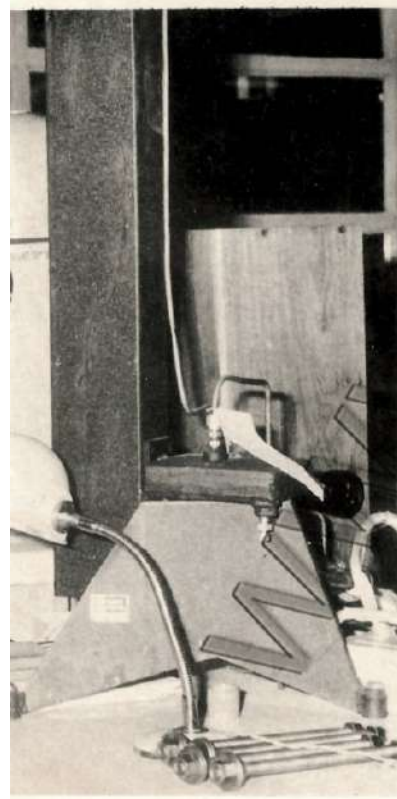
JOE Sequeira, Superintendent, Ancillary Overhaul Division, joined Tata Airlines in January 1938, after two years with General Motors.

Sequeira, who holds a Diploma from the Poona College of Engineering, started as a Mechanic in the Engine Shop in 1938, but soon went on to acquire Aircraft Maintenance Engineer's Licences 'A', 'C' and 'X'.

In 1940, Sequeira took over the newly-formed Electrical Section. He became an Assistant Superintendent in 1946 and two years later went to Lockheed Aircraft Corporation, and Eclipse Pioneer Division of Bendix International U.S.A., for training. The following year, the Instrument Section also came under his charge.

When the Ancillary Overhaul Division, comprising of Electrical, Instrument and Radio Sections was formed in May 1955, Sequeira was made Superintendent in charge of the Division. He has been there ever since.

Jai Wadia, B.E., A.M.I.E., Deputy Superintendent, Electrical Section (centre) discussing vibration problems of a turbo compressor under test with Dhun Billimoria (right), Inspector in charge of the Section.





R A D I O SECTION

Dinesh Shah (L) and Nagendra Nair checking the weather radar of a Boeing 707 in the Radio Shop.

Sambhu Mitra and Shiv Bharadwaj carrying out a modification on a HF set sub-assembly in the Radio Shop.

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Among the other instruments which require specialized skills in handling are the Auto Pilot and the Flight Recorder. The latter maintains a continuous record of altitude, acceleration, air speed and heading, which is helpful in the investigation of accidents.

RADIO SECTION

The communication and navigation equipment in a Boeing 707 is extremely sophisticated and uses three types of frequencies — High Frequency, Very High Frequency and Ultra High Frequency.

Available to an Air-India Boeing pilot are 880 VHF channels and 144 HF channels for voice communication and the HF set is so powerful that he can communicate with a station thousand miles away. To change the frequency, he no longer has to laboriously tune a set; it is now remotely controlled from the central pedestal near his seat and the change can be made in about 15 seconds. The entire radio equipment is located in the belly of the aircraft below the cockpit floor.

In addition to the communication equipment, the shop also overhauls the radio navigation equipment on the Boeing 707 such as the radio compass, VOR (Very High Frequency Omni Directional Range) ILS, (Instru-



ment Landing System) and Loran (Long Range Navigation) receivers, radio altimeters, weather radar, etc.

QUALITY CONTROL

Each workshop has its own inspectors who look after the quality control and who are responsible to the chief Inspector. Some of these men were trained abroad at the individual manufacturers establishments and later at the Boeing Company.

Their job is a tough one. They are the pace setters and trouble shooters who insist on the highest standards being maintained in the Workshop. No component or assembly goes out of the shop unless it carries a tag signed by the Inspector concerned.

The Chief Inspector's office maintains a record of overhaul life of each component and works to a strict schedule. As each aircraft comes in for its periodic

maintenance check, the maintenance staff know exactly what components are to be removed and replaced, the schedule for which is drawn up well in advance by the Production and Planning Section.

The aircraft shop then receives these components and forwards them to the Ancillary Overhaul Division who have their own schedules for overhaul of each component in the shops.

K. S. Mhatre



Senator Paltridge cuts the ribbon of our new Booking Office in Perth. Others in the photograph are Mr. Tony Pinto, Manager, Australasia and our Air Hostesses (L.) Nina Dubey and Esmie Ross.

AIR-INDIA'S Office in Perth, Western Australia, maintains the same high standard of decor which has become the hallmark of our offices abroad.

The decor employs an Indian motif combined with the best Australian furniture. The distinctly Indian touch is provided by a beautiful mural painted by the wellknown Indian artist, Shanti Dave, on the rear wall which is floodlit. The mural depicts the festival of Holi and is visible from outside through the open glass front. A side wall carries a second mural in moulded concrete. Delicately executed, it depicts scenes from the life of Buddha. The wall opposite is left plain with pendant lights in wrought brass shades. A torquoise carpet covers the floor.

ORIENTAL ARTISTRY

The entire office creates an atmosphere of oriental artistry which, in the opinion of Perth architects, is the finest addition to commercial interior decoration in Perth.

This view was also expressed by more than 50 leading business men who attended the opening of the office on June 1, 1964 by Senator Shane Paltridge who was then the Minister of Civil Aviation and now Minister of Defence.

GLOWING TRIBUTES

Senator Paltridge paid glowing tributes to our Chairman, Mr. J. R. D. Tata, for his contribution to Indian Aviation and spoke highly of Air-India's achievements in international air transport.

OUR NEW PERTH OFFICE

The photograph shows our staff David Figgins and Kaye Maskiell in our newly opened Perth Office. In the background is a mural depicting the Indian festival of Holi.





"I have always seen it happen to other people, but never thought it would happen to me," said Nick Hawkins of the Sales Department, Bond Street, when he won £900 on London's Independent Television programme "Criss Cross Quiz".

We watched his progress every Wednesday for five weeks and were sorry, although proud, when he was at last defeated with the question "Of which West African state is Bathurst the Capital?"

The rules of the programme do not allow a winner to earn more than £1000 and only one person has ever reached this amount, so Nick really deserves our congratulations.

Needless to say since receiving his cheque he has found that he has more friends than he thought he had, including his Bank Manager. He hopes to be able to invest some of his winnings, but is also looking forward to a first-class European holiday.

There were many smiling faces the day the bonus (sorry — ad hoc payment) was paid. No doubt many new purchases were made, some of which were immediately noticeable particularly at the Airport where there were some stunning items of summer wear produced by the female community, although at the time of going to Press we have not received any reports that these were of the topless variety.

MORALE RAISED

With some fairly consistent summer weather Londoners' morale has been raised. At the Airport Wing Hangar site there are usually moans and groans from the occupants due to its inaccessibility to the rest of civilisation but when the sun comes out these change to sighs of ecstasy.

With the splendid weather full advantage is taken of the surrounding green expanse for basking in the sun (only during the lunch hour, of course!) The workmen too, busy(?) erecting our new Stores and

Catering building are already turning a shade of mahogany which would be the envy of the Riviera. The mushroom pickers around the Hangar site have also been out in full force and spending their lunch hours wading through the fields armed with little plastic bags and returning with these full to the brim.

Another compensation for the Wing Hangar workers, especially for the nature lovers (biological), is to see the pranks of the rabbits and the hares frisking about outside the Hangar windows.

The bowling team consisting of Messrs. Burns, Coffey and

Milston, aided by Diane Lee, have just entered a new season and our good wishes go to them.

Cricket is in full swing, thanks to the interest and assistance from the Management in the shape of gear, transport and funds. Following the return match with Bond Street, our team played Mullard House, but unfortunately rain interfered and so the match was not concluded. Rain also stopped a match in June against the Ceylon Students XI. An enjoyable match was played with the Indian Gymkhana, who always field a very strong team and we lost by two wickets. Against the Metropolitan Police we made 120 for 5, the top scorers

Paddy Hopkirk, the racing driver, leaving London for Europe on our service. ▶



Muriel Spark, the authoress, whose books include "The Bachelors" and "The Bells of Peckham Rye", joined our service in London for New York.



being Roberts 44 and Manjit Singh 32, against the "bobbies" score of 83 for 7.

We recently said farewell and good luck to Kalyan Ghose, who has been transferred to Fiji, and also goodbye to John Molyneux from Sales, who resigned after seven years and has joined British United Airways. Sammi Contractor from Reservations has also left us and has returned to work in United States.

SERVICE RECORD

We would like to mention that according to our records this year Eric Pereira, our London Manager, completed 18 years' service; Catherine Dowling from Cargo 12 years; and Sam Muley from Stores 10 years.

The summer is certainly the time for visitors and London is not only full of tourists (for which we are truly thankful), but we have also seen a lot of our overseas executives and junior staff who have been visiting London on duty or on leave.

As a farewell gift the staff gave Jim Ward a rocking chair (at his own request) and his letter of thanks read as follows:

"I should like to thank you all most sincerely for my splendid leaving present — a rocker which even a 'mod' would be proud to own.

"It is not everyone who can claim to have a free seat for life on Air-India and I am both grateful and flattered to be put on the same footing as Eddie Richenbacher."

Trevor Turner.

INSIDE U.S.A.

JOHN McCourt, District Sales Manager for the New York District Office, takes credit for introducing the first Maharajah Cruise for travel agents.

Approximately 120 travel agents from New York, New Jersey and Connecticut took part in an evening cruise up the Hudson River. Cocktails and hot hors d'oeuvres and a sea going 3 piece combo helped to put everyone in a cruise-like atmosphere.

Mr. L. Farkas of the Tatra Slovak Travel Agency commented that this is the first time an airline entertained in such a wonderful fashion. Two strong-hearted agents travelled over 100 miles from Kingston, New York, to attend the Maharajah cruise. Both Mrs. Ann Olson and Miss Agnes Bruce of the Greenwall Travel Agency said the trip was excellent. Mr. H. Vigilant of American Express said, "This is the best agency function I have ever attended."

SPECIAL KUDOS

The cruise was so well received by the travel agents that John McCourt indicated he would try his best to see that this Maharajah Cruise becomes an annual affair



Travel Agents enjoying the Maharajah Cruise up the Hudson River.

Our Reservations Manager, Mr. D. N. Gazder, achieved the golfer's dream by scoring a Hole-in-One on the 11th green of the "Green Course" at the Bethpage State Park in New York. Mr. Gazder aced a Hole-in-One with his 4 iron. This achievement was validated by Bob Jablonsky of the Professional Golfers Association of America. This feat allows Mr. Gazder to enter the annual Old Smuggler Sweepstakes.

The first prize in this contest, should Mr. Gazder win, is a trip to St. Andrews in Scotland and \$1,000 in cash. Good Luck! Mr. Gazder — we're ready to help you spend that prize money.

GOLDEN ACCOLADE

Mr. William F. Burke, Sales Manager, USA & Canada, was presented with a "Golden Accolade" plaque awarded to Air-India as 'The Designers Airline' by the International Fashion Festival in Las Vegas, Nevada, in April 1964. In connection with this programme, Air-India was privileged to carry from Europe to the United States some of Europe's leading Fashion Designers and their models.

NEW FACES

A Maharajah Welcome to Mr. Robert F. Burke, R. S. Yuhasz and Mr. Gene Bertman. Mr. Burke joins our Sales family as Resident Sales Representative in Cincinnati, Ohio. He will be responsible for sales activities in the Southern part of Ohio and Kentucky. Mr. Yuhasz joins us as Resident Sales Representative in Pittsburgh, Pennsylvania. He will carry out sales activities in the western portion of Pennsylvania. Mr. Bertman joins the New York Headquarters Sales Team as Officer on Special Sales Duty. WELCOME BACK to Bill Shaw, Cargo Sales Manager, USA & Canada, who has been recuperating from an auto accident. It is good to have you back, Bill.

Air-India has joined forces with the Black and Decker

Corp. for an incentive sales programme to help sell a new line of Black and Decker SAWS. Air-India is receiving full colour and black and white advertising exposure in the Black and Decker Programme as well as over \$250,000 worth of merchandising promotion.

Air-India expects to carry about 140 Black & Decker salesmen to Europe in the near future on an Incentive Charter. Air-India and Hathaway Shirt Corp. are jointly pushing a new product shirt line called India Lemon. Air-India's posters and display materials in connection with this programme have been placed in over 350 Department Stores throughout the US. Air-India and Broadstreets Men's Clothing Stores are promoting a complete line of men's clothing using the India-Madras fabric. Five top stores locations in mid-Manhattan are featuring a complete Air-India display in each window.

ATHLETIC ACTIVITIES

Air-India's Soccer Team lost their first four games. Werner Hoffman, Manager of the team, said that his ball team has excellent future potentials. In spite of the fact that the team is new, it gave its opponents a stiff competition. The team's membership is represented by the following departments: Space Control, Mail Room, Accounts, Refunds, Airport and Cabin Service. We will be following their future games very closely.

Geno Delfino

Looking for the Magic in Air-India's Carpet

(Contd. from Page 3)

To appreciate this relationship between high morale and sound finance, it is only necessary to record some of the chairman's remarks in Air-India's earlier reports:

"One of the greatest assets of the corporation lies in the morale and contentment of its staff" (1953-54); "As we gather further experience and continue to grow, the efforts put in at building up a compact, skilled and disciplined organization will pay handsome dividends" (1954-55); "To all those connected with the corporation, Air-India is a source of pride and of a sense of participation in a great endeavour . . . so long as through sound management, good human relations and financially successful operations this high morale can be maintained, there need be little fear as to the future of the corporation" (1955-56).

Against this background, the airline's early awareness of the need to escape from the grip of smallness can be seen as one big step in maintaining morale. In the last analysis, then, it seems that the answer to a thing like a low break-even load factor is not to be found in the realms of economics but in the field of psychology. In the case of Air-India, it stems from the belief that success depends on high morale, that high morale depends on sound finance, and that sound finance depends on farsighted leadership in mapping out the right course to follow. And that is only another way of saying that a carpet that knows where it's going is a magic carpet.



PHOTO NEWS



- 1 (From L.) European models Silvia Allora, Ginette Heldman, Utta Brauer, Michela Gamba, Sally Jamieson, Isabel Princeipe and Ingrid Walker. They travelled on our service to U.S.A. to participate in the International Film Festival held at Las Vegas, Nevada.
- 2 Mr. & Mrs. Fialka of Pantomime Theatre Group, travelled on our service from Geneva to the U.S.A.
- 3 The photograph shows (From L.) Mr. A. F. Pinto, Manager, Australasia; Miss S. Massand, sister of the Indian High Commissioner in Australia; Mr. K. K. Ghose, Manager, Fiji Islands; Mrs. K. K. Ghose; and Mr. B. Massand, Indian High Commissioner, Australia, during a dinner party in Suva to meet our inaugural invitees.
- 4 Sydney Actress Queenie Ashton is photographed here before leaving on our Boeing 707 for India.
- 5 Australia's Minister for Supply, the Hon. Allen Fairhall, speaking to Mrs. Grace Jacob, wife of our Asst. Manager, Australia, during the A. F. T. A. Convention in Sydney. (Courtesy : "Daily Telegraph.")