

Exporting Aviation Technology

How Qantas Airways has helped Southeast Asia and Pacific Countries build aviation service for citizens

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During the last 20 years the economies of most Southeast Asian and Pacific countries have changed dramatically. Although there are a number of contributing factors, it is no coincidence that during this time aviation has been introduced to these areas on a planned and commercially viable basis.

Of course the same can be said, to both a greater and lesser degree, about other regions, but it is remarkable that one name, Qantas, keeps recurring in aviation development from Bangladesh through to the outer islands of the South Pacific Basin.

84 At the outset, however, it is very important to recognize that the role played by Qantas in the growth of regional aviation is but one aspect of Australia's overall contribution.

More to the point perhaps, where Qantas has assisted other aviation instrumentalities, it is not so much a transfer of technology in terms of the manufacture of equipment or materials which has occurred but rather a transfer of technology in terms of know-how and expertise.

We in Qantas are users as opposed to manufacturers of equipment or hardware. We merely manufacture aircraft capacity while maintaining equipment which, for the most part, is purchased elsewhere.

Experience

This being the case, our speciality, as it were, is experience—the kind of experience which only 59 years of running an airline can provide. It is this which we have exported, unconditioned by licensing laws, and in fairly large consignments.

Even though technology can be defined as the application of science or knowledge, especially to industrial or commercial objectives, perhaps a more appropriate title for what I have to say might be "Exporting the Experience and Know-how of Qantas."

The export of Qantas' aviation experience and expertise has certainly been widespread. Over the years aviation organizations which we have helped include the Royal Malaysian Air Force, Malaysia-Singapore Airlines, Malaysian Airline System, Air Niugini, Air Pacific Limited, New Hebrides Airways Ltd., Air

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Melanesie Consortium and other companies associated with tourism infrastructure including, for instance, the Nadi Handling Company. More recently, we have agreed to assist with the development of the airline of Bangladesh—Bangladesh Biman.

The nature and extent of our assistance is naturally dictated by the particular requirements of the recipient organization and as a result, it has varied considerably.

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By way of illustration, I should like to mention two quite disparate situations.

First, take our five-year involvement (1973-1979) with the Royal Malaysian Air Force. It was unique. The main program centered upon a consultancy agreement with the Malaysian Government for the design and layout of an engine overhaul workshop. Then, upon its completion, Qantas provided the expertise for the institution of work procedures, documentation and on-job training for Malaysian Air Force personnel.

Similarly unique was an arrangement with the Thai Government, under the umbrella of the Colombo Plan, whereby in 1975 we put seven Thai police officers through a 12-month apprentice training scheme which had been specially designed to assist them with the operation and maintenance of a number of helicopters, which the Thai Government had purchased from Hawker De Havilland. Helicopters of all things! (When you consider that helicopters are aerodynamically 'all wrong' for us fixed-wing devotees!)

Perhaps it will be useful if we take a closer look at how Qantas' assistance to another organization evolves. In this regard a point worth stressing is that Qantas' involvement with the aviation infrastructure of another nation invariably finds its genesis in an application for aid. In other words, we do not ask to help but if help is requested and we are in a position to provide it, we gladly do so mindful of a clear responsibility to further the progress of aviation in the interests of improved international communications.

Up until fairly recently, it was usual for Qantas to be approached directly by the organization concerned. Today, it is more likely that an overseas government will approach the Australian Government with a request for assistance from Qantas, and such assistance may ultimately be provided under a comprehensive program of governmental aid.

At the earliest opportunity, senior Qantas specialists undertake the responsibility of visiting the organization concerned for an on-site assessment of the applicant's particular needs. A report is then prepared and presented to the applicant for evaluation and discus-

sion. Finally, pursuant to approval being granted by the relevant authorities, including of course our own Board and the Departments of Transport and Foreign Affairs in Canberra, the terms of assistance are agreed upon between all interested parties.

With respect to the conditions governing any program of assistance, one objective has always been paramount—the localization of staff and the withdrawal of expatriates on secondment as quickly as possible. Qantas has always believed that the shape assumed by aviation in other countries must be determined by the governments and the peoples of those countries in the light of their own social, political and economic circumstances.

For this reason, very early, we developed a policy of having local staff progressively displace Qantas people abroad.

In the interim, the role which we see for ourselves is that of attempting to apply the technical, operational and commercial experience which is resident in Qantas to the policy and development objectives which they have set for themselves.

One example of this approach is the Malaysian Airline System or M.A.S.

When Singapore separated from the Federation of Malaysia in 1965, the Federation was served by its own airline. Qantas had been associated with the development of this airline for many years. Indeed in 1960, the present General Manager of Qantas, Keith Hamilton, had been seconded to what was then Malayan Airlines and later became the first General Manager of its successor, Malaysia Singapore Airlines, when it was founded in 1963.

Some years after the dissolution of the Federation it became evident that the air transport needs of the new city state of Singapore and the rest of Malaysia were different. Malaysia required a broad base of regional and domestic services while Singapore required to operate vigorously over international routes. It was therefore decided in 1972 that the airline Malaysia Singapore Airlines should split, whereupon Malaysia approached Qantas for assistance in the establishment of its new airline.

Qantas drew the matter to the attention of the Australian Government which indicated its agreement in principle provided, however, that similar support was at the same time made available to the emergent airline of Singapore—Singapore Airlines.

No Strings

Ultimately, Malaysia alone sought our assistance and this gave rise to a Technical Services Agreement between Qantas and M.A.S. There were absolutely no strings attached to the agreement which we signed. Qantas was paid a consultancy fee and the costs of Qantas staff working for M.A.S. were met by the Malaysians.

In return M.A.S. received managerial assistance, experienced key staff to assist in setting up operations, advice on recruiting and training and further training assistance for Malaysians at the Qantas Jet Base in Sydney.

Some equipment was available from the old M.A.S. operations, as were a number of highly-skilled staff.

But there were such matters as the preparation of loan applications for the purchase of seven Boeing 737s, operational schedules to be worked up, marketing and manpower plans to be developed, engineering parameters to be decided and staff to be appointed.

The present general manager of Qantas, Keith Hamilton, headed the management team which initially founded M.A.S.—a team which included Doug Scott, currently our director of Engineering and Maintenance, who was the first M.A.S. director of Engineering, George Howling, now our director of Marketing, plus senior financial and flight operations personnel. These and other Qantas men were seconded to M.A.S. and, backed by specialists in Sydney, provided the necessary experience and guidance, but always on the understanding that their task was that of advising the men Malaysia had chosen to run its airline. That M.A.S. was in the air with a new aircraft type (7 B-737s) in just over two years and has recorded a profit from the outset, is a measure of the success of the program.

Currently, Qantas continues to support M.A.S. by providing total purchasing backup in San Francisco, the overhaul of engines and components, periodic maintenance of B-707 aircraft, the secondment of two maintenance instructors and technical assistance upon request.

Another aspect of Qantas assistance involves bringing people from other countries to be trained in Australia. For example, two Air Mauritius employees graduated in 1978 as licensed B-707 engineers—the first two such licensed engineers in Mauritius.

Organization Backing

With respect to Air Mauritius, this particular example amply illustrates an important facet of technological support from an organization as large and experienced as Qantas. While only one Qantas employee was seconded to Air Mauritius, in the course of his secondment he was able to achieve a great deal. In an instance such as this, the Qantas expert concerned is able to advise on such diverse subjects as, say, airport systems, marketing and sales, because he has the full backup of the entire Qantas organization.

In addition to providing administrative and technical assistance, Qantas has, on a number of occasions, assumed its responsibility toward the needs of developing countries in our region by taking up shares in an airline when invited to do so, either by the airline itself or by its government. Perhaps the host countries in this context see such an invitation as a means of giving them greater access to the experience which is resident in Qantas, bearing in mind that we have long been established as an independent operation, even with respect to the maintenance of our equipment.

Two such examples are Air Niugini and Air Pacific.

Much has been written about the dramatic and exciting development of aviation in Papua, New Guinea. Without the airplane, the integration of this incredible variety of tribes and cultures, which peacefully gave rise to a strong and separate nation, would almost certainly not have been possible.

Of course it was not planned that way! It was greed for gold that gave aviation its chance to show what it

could do. In the Bulolo Valley near Wau vast quantities of alluvial gold were found in 1927 but the field was 14 days' walk over very difficult country. The alternative to the 800-yard-per-hour unenthusiastic human porter who consumed much of his load, was the 90-mile-per-hour wood-and-fabric De Havilland airplane of those days. In the result, by 1934 Lae and Wau were the world's busiest airports!

After the war Col. J. K. Murray, facing the daunting task of running a country without roads or railways, asked the Australian Department of Civil Aviation for help and Sir Hudson Fysh, a founder and then chairman of Qantas, met Col. Murray in Port Moresby to work out a suitable arrangement. After all, Qantas was operating Sydney to Lae three times per week with DC-3s, as well as owning New Guinea Internal, as it was called. It was logical that we should be asked to lend a hand.

No Airports

The administration requested not only charter capacity to supply the Patrol Posts and District Officers, but regular services along the Papuan Coast to the west and east of Port Moresby, to New Britain and Bougainville. And as there were no airports on these routes, the war surplus Catalina flying boats were used. We were also requested to provide regular services on other sectors from Lae to the Highlands, for example, where DC-3 and DH-84 aircraft were employed.

Qantas pilots were renowned for their ingenuity in New Guinea. Any of our pilots who cut their flying teeth in the territory will tell you hilarious stories about wild and rugged expeditions across fearful flying country. The strict rule was "no see, no fly," clouds being referred to invariably as "stuffed mountains." Air drops to people in remote areas without airstrips were a regular occurrence and one of the most unusual was a consignment of fowls.

The problem was how to prevent them from using their wings until after they were clear of the aircraft slip stream. It was decided to experiment with a noisy barnyard rooster which was responsible for waking our fellows too early each morning! They wrapped him up in a kind of paper bag, using old sheets of the Sydney Morning Herald, I am told, and then took him aloft to test his capacity for survival. When it was discovered that he had managed to struggle free just short of the ground, the same clever device, using toilet paper this time, was used for the other 20 which happily all made a safe landing and on target!

I know you regulators will be dismayed to hear that in the first seven years of flying in Papua, New Guinea, there was no licensing whatever. Even when, belatedly, an officer did appear, he had to hastily seek exemption from Australian standards; otherwise, everything would have stopped! Sensibly, this attitude prevailed well into the 1950s.

In early 1960, when Qantas handed over its territorial services to T.A.A. and Ansett, we could look back on an extensive and viable network of services covering an exciting 15-year period. We had started in the territory with a DH-84 and a total staff at Lae of seven people comprising a manager, a pilot, two engineers, two traffic officers and a cook. By 1960, staff

had risen to 620 and a fleet of DC-3s and Otters operated to 143 points throughout Papua, New Guinea.

After withdrawing from the territory, the company maintained a link with the area, operating some of its Far East services through Port Moresby. With the formation of Air Niugini which commenced operations in November, 1973, Qantas resumed equity participation in the provision of air services in the territory when it took up a 12% share of the issued capital in accordance with the country's National Airline Commission Act.

Repays Capital

When Air Niugini began to operate international services, however, in January 1976, the Papua, New Guinea Government elected to repay the capital contributed by Qantas and T.A.A., though not that contributed by Ansett, because it felt that the presence of the Australian government-owned airlines as shareholders could prejudice its bilateral negotiations with other governments.

From its inception, Qantas lent considerable support to Air Niugini and is still actively assisting with technical air crew training and technical back-up, including all maintenance work on their B-707 which was purchased from us in November 1976.

Similarly, in the case of Fiji, the company was quick to respond to the changing status of its airline, Air Pacific, and in accordance with the Fiji Government's wishes, has progressively withdrawn from equity participation since Fiji achieved independence.

The story of our involvement in Fiji dates back to 1957 when Qantas, in the face of fierce competition from Pan American Airways, purchased Fiji Airways with the support of both the Fijian and Australian Governments and assumed responsibility for domestic operations within Fiji.

Qantas subscribed all the capital of the company until the 1960s when, progressively, Air New Zealand, British Airways, the Fijian, Tongan, Nauruan and Western Samoan Governments, the Solomon Islands and the Gilberts and Ellice Islands were invited to become shareholders.

In 1971 Fiji Airways became Air Pacific and the new airline was established on the basis of a general understanding that it would serve shorthaul regional routes complimentary to the trunk route operations of the longhaul international carriers. With the establishment of airlines in Nauru, Western Samoa and the Solomon Islands and the concession of rights by Tonga to Air Nauru, however, Air Pacific's role as the principal, purely regional carrier was slowly eroded and her profitability seriously challenged.

This has led to the continued restructuring of Air Pacific as a wholly owned Fijian airline with a firm policy plan to operate more profitably by negotiating traffic rights which will give them a greater share of longhaul international traffic.

Thus, the Fijian Government has progressively acquired a majority of shares in its airline and now holds in excess of 75% of the issued capital. As a positive contribution to Air Pacific's future viability, in April 1977 Qantas discontinued its once weekly B-707 service between Brisbane and Nadi, a move designed to give the

Fijian carrier greater utilization of its BAC-111 aircraft and improve its profitability. Qantas today holds only a 9% interest in Air Pacific. In December last year it stood down from representation on the Board.

During the company's period of close involvement with Air Pacific, all categories of staff were seconded to the airline, intensive training took place in Fiji and, in addition, many Fijians were trained in Australia. These people are now back in Fiji running their own airline. This kind of localization has occurred not only within Air Pacific but also in connection with the aircraft handling company and the flight catering center which were established by Qantas at Nadi Airport.

In the main, staff on secondment to other aviation concerns have now been withdrawn and the companies concerned are well and truly on their feet. Meanwhile, we continue to provide assistance to these carriers on an ad hoc basis as and when requested.

There is, however, one airline with which Qantas is currently engaged in the early stages of development assistance. That is Bangladesh Biman.

The Bangladesh Government requested Qantas aid through the Australian Government. This assistance is being funded by the Australian Development Assistance Bureau, the overseas aid unit of the Department of Foreign Affairs, which is perhaps indicative of the manner in which aviation assistance will be extended in the future.

Training

The program includes both management assistance and technical training, with about 20 Qantas staff participating for up to two years. Their objective is to improve existing systems and introduce new ones where appropriate, to train Biman staff to use and maintain these systems and to monitor progress prior to withdrawing.

A technical apprentice training program will also be provided for 66 Bangladesh Biman employees, all of whom will be trained for about four years in such skills as engineering, aircraft maintenance, component overhaul and maintenance, fitting and sheet metal work, electrical and ground support vehicle maintenance. We have already provided assistance with the training of cabin crew and scheduling staff.

That briefly is an overview of the way in which Qantas has gone about exporting its aviation know-how. I do not suggest that without Qantas these companies would be wingless. Nonetheless, it is a matter of considerable pride that the organizations Qantas has assisted are now operating, without exception, successfully. Indeed, many have taken their place among the established carriers of the world.

At the same time, we are particularly conscious that considerable benefit has accrued to Qantas in all that we have undertaken. As a result of extending our

expertise to embrace new conditions and modes of operation, our own store of experience has been strengthened immeasurably.

There is too, every reason to believe that the company's overseas activity has augmented Australia's relations with her neighbors, although it is easy to exaggerate the influence of development assistance in diplomacy and trade. To the extent, albeit a limited one, that old ties do influence these things, the part we have played in the development of aviation abroad will remain a clear and public indication of Australia's willingness to help countries less developed than herself.

The inevitable question is whether the competitiveness of this world is conducive to the continuation of such essentially close human relationships.

Certainly, on the technical side, the residual relationships are as sound today as ever they have been; but then there is in aviation a phenomenon which our technical people often call a "brotherhood" of airlines. That is, a willingness to share resources and to cooperate with one another whatever the prevailing economic, political or commercial climate.

On the other hand, it would be unrealistic to conclude that the picture is altogether panglossian, particularly from a commercial point of view. Inevitably, difficulties arise with the passage of any individual or group of individuals from youth to maturity, from dependence to independence, whether it be nations, women, or even airlines in pursuit of equality. So, not unnaturally, there have at times been problems and conflicts of interest in connection with establishing an equal partnership to take the place of what was formerly an unequal relationship.

On the whole, however, relationships between people, where one has nourished another's growth and performance, usually develop into lengthy associations. I think it fair to say this observation conforms with our experience at airline level.

This is true if only because the exchanges which have occurred have in no way been limited to the field of aviation. They have extended far beyond, into that all-important realm of understanding between peoples.

To close, one final observation. It may well be that the sort of involvement we have undertaken in the past is unlikely to recur. By this I mean the responsibility for building the complete infrastructure of another airline. In a situation where almost all our neighbors are now independent or self-governing, and where there are many more technologically-experienced carriers in the region, increasingly the developing nations and smaller operators may be expected to look to other carriers as well as Qantas for the advice and support they require — carriers perhaps, which over the last 20 years Qantas has helped to develop.