Training Papuans As Boat-Builders

Through the centuries the Polynesian and Melanesian peoples have thoroughly demonstrated their natural ability to build and operate sailing canoes all over the Pacific. This is well appreciated by most, especially those commercially interested in boat-building. However, it is not generally well known that many of these people have also demonstrated their ability to grasp the rather complex trade or art of building small boats as practised by European builders. This is undoubtedly due to their own natural aptitude for handicrafts, around which they have built their own way of life, adapted to Pacific conditions.

The author recalls many interesting discussions held with old Papuan canoe builders, and through these learned to appreciate the ability and craftsmanship of these very fine men. Their appreciation of line and form as displayed in a 40-foot dugout canoe was perfection itself, and when sail area was discussed the Mailu canoes with their crab-claw shaped sails always came into the picture.

A very good example of what, in many of these people, lies "just below the surface" (if one may be allowed to use such a term) was given early in the 1930's, when a well-known mission station situated on Kwato Island decided to enlarge its small boatshed and accept an offer by the Papuan Government to subsidize a technical school specialising in boat-building. This was not really so. Mainly, the fault lay perhaps in the way tuition and criticism were given, for, in actual fact, provided the new recruit to boat-building is keen and reasonably intelligent, he quickly overcomes his shyness and settles down to assimilate all that his teacher can teach, and that which his background permits him to understand.

Many of the trainees recruited for the training scheme had had the benefit of a mission school training, though quite a few were ordinary village folk. However, equipped with the most important assets of all, enthusiasm and determination, they soon settled down to learn this way of "real" boat-building.

The annual enrolment of trainees was twenty—and the average length of the course was three years.

A great advantage enjoyed by the scheme was the excellent timber mill nearby, which cut and dressed boat-building timber almost to order. It was run by native mill-hands, many of whom became trainee boat-builders.

In accordance with a technical school

From 1930 to 1939 the author directed for a mission station on Kwato Island, a Government-subsidized school for training Papuans as boat-builders. The scheme was highly successful. A wide variety of craft from 10 to 65 feet in length were built or repaired by the trainees, whose natural aptitude for boat-building the author found equalled that of European apprentices.

By ARTHUR SWINFIELD*

At Kwato Mission in 1932. Technical school is on the right, boatshed centre. The timber mill (left) cut and dressed boat-building timber almost to order.

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Above: "Kwato II", designed by the author and built by Papuan trainees under his direction, is 62' on the waterline. She was launched in 1934 and saw service throughout World War II. Now known as "Moutuana", she is owned by a Milne Bay co-operative society. Right: Fine craftsmanship is apparent in this close-up of deck joinery work on "Kwato II".

programme laid down on broad lines by the Papuan Government, 16 to 20 students began their preliminary wood-working training in 1930 at a small school situated about 100 yards from the boat-building sheds and timber mill. This training included very elementary geometry (as used in simple boat-building), use of wood-working tools, elementary drawing, and a knowledge of dimensioned rough sketches.

Needless to say, these early students were "hand-picked", and all spoke fairly good English.

They came from villages all along the coast, and "lived in" on the mission station while serving their training period. Hours were not long and the work was kept as interesting as possible. All types of sport were encouraged, for this greatly helped to overcome the initial shyness of the trainee and allowed him to demonstrate his ability to "give and take" away from work-a-day life.

Technical school lessons were given twice a week, each lesson lasting two hours. Monthly tests were given to ascertain progress. At the same time, in the boatsheds the trainees were receiving continual instruction in practical boat-building.

Teaching was not easy, although most interesting. It can be truly said that the apt Papuan trainee could hold his own with any ordinary European apprentice in wood working, and in many cases would perhaps generally excel in boat-building.

Theory was not so easily understood, but, all in all, a good journeyman (one who had completed his apprenticeship) could be turned out in three years, as compared with the usual European period of five years.

This can be readily understood when one considers the fact that these trainees were most keen to learn, and had none of the side issues to distract them that the average apprentice in an Australian boat-building yard has.

**Most Satisfactory Results**

Results were most satisfactory, and before long the "school" was in production. Whaleboats, dinghies, cutters, and launches of all types were built and repaired. Those built ranged from 10 to 65 feet in length, and those repaired were some of the largest in the territory. Some of the more interesting vessels built by Kwato were:

Six 32-foot trochus cutters and eighteen trochus fishing dinghies (all to one order).

*Kwato I*, a 40-foot (LWL) mission vessel, later sold to a North East Coast trader.

*Osiri*, a larger edition of *Kwato I*. She achieved fame in the earliest stages of the Japanese landings at Ahoma and Giligili in Milne Bay.

*Kwato II*, a 60-foot (LWL), twin-screw diesel vessel which, to the author's knowledge, is still the largest vessel of her type to be built by native labour in the Pacific. She would be a credit to any European boatyard. She was launched about 1937 by Sir Hubert Murray, and during the whole of World War II was in commission by the Armed Services. She is now owned by a large Co-operative Society in Papua.

Over the years the "school" achieved a very enviable reputation, and pupils came from far and near to learn boat-building or an allied trade.

In time, the scheme became practically self-supporting, and from very humble beginnings became famous throughout Papua and New Guinea for the quality of its work in building and repairing boats.

Unfortunately World War II interfered with the progress of the "school", and it is now many years since a technical training scheme flourished as it did in the days when *Kwato II* was being built. Nevertheless, the need for such a centre still exists.

Such is the story in brief of one technical training scheme that really worked. Not only did it produce good tradesmen; it also produced men with confidence in themselves and with a much broader outlook on life.

Although the greater proportion of trainees followed boat-building after the completion of their training period, many chose house-building, but no matter what "trade" they adopted—their services were always in great demand throughout Papua.

**Factors Essential For Success**

The success of the Kwato training scheme could perhaps be attributed to several factors, including—

- Careful selection of trainees;
- Healthy location of school;
- Access to timber stocks;
- Reasonable provision of machinery;
- Encouragement given to the earliest trainees to assist in teaching the late-comers.
SELECTION OF TRAINEES: The careful selection of trainees was, of course, essential to the success of the scheme. Mission education was highly desirable, but not altogether indispensable. Many "village boys", selected for their common sense and keenness to learn, made good as boat-builders. An aptitude for the use of ordinary wood-working tools was always sought by the instructor.

LOCATION OF SCHOOL: The school was located on a very healthy island, practically free from malaria, and about two miles from a good shipping port. Malaria soon "deadens" interest even in the most keen student. Ordinary tropic conditions are not conducive to study, but once malaria "takes over" the student is useless. (This, of course, also applies to the instructor.)

ACCESS TO TIMBER STOCKS: Ready access to timber stocks was essential for, once material becomes scarce, the work slows down and trainees begin to lose interest. The whole success of such a scheme rests on the continuing interest shown by the instructor and the trainees.

PROVISION OF MACHINERY: The use of machinery was always a source of argument among the people interested in the training scheme. The main point at issue was: should a trainee be encouraged to use machinery or hand tools?

In the author's opinion, both are essential. One should start off with elementary hand tools, then, while these are being mastered, simple machines should be used that save time in labour and give the trainee more time to participate in the actual construction of a boat. It was found that continual use of hand tools tended to blunt the interest of trainees. With the aid of simple machines, however, they can actually see the results of their work materialize, the boat growing to shape before their eyes.

The use and proper care of hand tools were, of course, always encouraged, and it was not long before trainees grew to value keen-edged hand tools as well as the machines.

TRAINEES ENCOURAGED TO TEACH: Every trainee was regarded as a potential teacher of boat-building, and he was encouraged to pass his knowledge along to his "mate" at every opportunity. Generally speaking, selfishness was unknown, for in the general scheme of learning every man depended on his "mate" or...
“mates” to produce a worthwhile job of work.

Occasionally one would come across a true individualist, and he would be the ideal man to specialize in one or two departments of boat-building. One such trainee, the author recalls, specialized in spar-making, another in caulking, and so on. When a specialist did develop, he was usually a first-class man in his field.

Trainees Always Appreciative

One sometimes hears the remark that, among Pacific islanders, a sense of gratitude for a teacher’s efforts is noticeable by its absence. After many years of technical teaching among Papuans and some periods of lecturing in various island groups, the author cannot in any way subscribe to this view. He has always found pupils eager to learn, and most humble and apologetic for mistakes made on the job. And never were politeness and gratitude ever lacking.

Pacific School Of Boat-Building Needed

In conclusion, the author feels that at Kwato and elsewhere the Pacific Island people have amply demonstrated their ability to learn the art of building wooden boats. The need for wooden vessels throughout the Pacific is still as great as ever, and selected students under proper tuition would reflect every credit on those responsible for the establishment of a “school” for boat-building.

The selected students or trainees would be better regarded as potential teachers, for they could then be encouraged to spread their knowledge in their own districts. All this would take considerable time, but the general benefit to the Pacific Island people would be enormous.

New Secretary-General Assumes Duties At SPC Headquarters

Mr. T. R. Smith, the new Secretary-General of the South Pacific Commission, arrived in New Caledonia by air on March 7. He was met at Tontouta airport by Dr. Emile Massal, Acting Secretary-General, and representatives of the New Caledonian Government.

On his way to New Caledonia Mr. Smith visited the Commission’s offices in Sydney. He spent two days in Canberra, A.C.T., where he conferred with Australian officials and representatives of other member governments of the South Pacific Commission.

New Introduction Of Edible Pond Fish From Philippines

The introduction of carefully-selected species of edible pond fish to Pacific territories for stocking inland waters forms an important part of the Commission’s long-term programme for the development of fisheries in the region. In October 1955 the Commission imported by air from the Philippines an experimental consignment of tilapia. They quickly multiplied, and successful transplantings have since been made to many Pacific territories. Last January a second similar transfer of fingerlings took place, of four further species of edible pond fish. A brief account of the operation appears below.

AROUND three hundred fingerlings of four different species of edible pond fish arrived in New Caledonia by air on Saturday, January 18. They had been flown over five thousand miles from the Philippines in the care of South Pacific Commission fisheries officer H. van Pel. They have been released temporarily in two experimental fish ponds maintained for the Commission at the Port Laggerre farm school near Nouméa. Later this year they will be transferred to fish ponds being prepared by the Forestry Department of New Caledonia.

During their long journey the fingerlings were carried in plastic bags of water supported in cardboard cartons. To avoid subjectioning them to extremes of cold and air pressure, Mr. van Pel kept them with him in the pressurized cabin of the airliner.

The four species in the consignment were carp, sepat, dalag and gourami. All are popular eating fish in South Asian countries, where they are widely grown in rice padi, artificial ponds or natural waters.

Over the next two years Mr. van Pel will study their rate of growth, breeding rate and general suitability for introduction to other South Pacific territories. Species which adapt themselves successfully will be transplanted to other Pacific islands, where they will provide a new source of protein for islanders not now receiving sufficient in their diets. The stocking of natural waters is the primary aim for which these fish were introduced.

An earlier introduction of another popular edible pond fish in South Asian countries—the tilapia—has proved highly successful. In October 1955 Mr. van Pel transported a consignment of tilapia fingerlings from Manila to New Caledonia by air. They quickly multiplied, and successful transplantings were made to other territories. Including several introductions made from other sources, tilapia are now being grown for food in specially-made ponds and natural waters in New Caledonia, New Hebrides, Solomon Islands, Fiji, Papua and New Guinea, Netherlands New Guinea, Cook Islands, Western Samoa, American Samoa, French Polynesia, Guam, and the United States Trust Territory.