

Plywood in Retrospect

VANCOUVER PLYWOOD COMPANY

No. 12 in a series of monographs on the history of West Coast plywood plants



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This monograph is dedicated to the memory of Frost Snyder.

PREFACE

The story of Vancouver Plywood Company is number twelve in a series of historical monographs sponsored by the Plywood Pioneers Association describing the origin and development of the early West Coast plywood mills.

As in previous monographs, much of the information has been obtained from men who were closely associated with the mill. To these I am deeply indebted, especially Ray Stiger, veteran log buyer with an intimate knowledge of the raw material problem; Al Anderson, an early superintendent with much data on the machinery and equipment; Frost Snyder, who with Bill Kilworth took over a shaky enterprise and stabilized it successfully; John Power, general manager for 20 years with a great fund of background information; and Elmer Hall and his colleagues at Fort Vancouver Plywood, the cooperative that bought out Vanply.

Finally, grateful acknowledgement is made to assistance from American Plywood Association staff and particularly Mrs. Verner (Doris) Larson and Mrs. Ralph (Ruth) Bogan for manuscript typing and to Mrs. Ted (Liz) Dutton for final editing.

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VANCOUVER PLYWOOD COMPANY

Vancouver Plywood's origin can be traced back to the climactic ending of World War I in 1918 when the manufacture of munitions, ships, and war materiel was suddenly stopped by government order. Liquidation of surplus manufacturing capacity started almost immediately after the November 11 Armistice.

The Standifer Shipyard on the Columbia River, at the western edge of Vancouver, Washington, was no exception to the rapid liquidation procedure. The ship-building facility with its several buildings, one a three-story structure, was soon leased to the newly formed Mackall-Paine Veneer Company, Mackall owned the Western Box and Basket Company in San Francisco, and was joint owner with Herman Paine of a similar operation in Glendale, California.

The Mackall-Paine Veneer Company in 1923 installed a shook operation to produce boxes, crates, and fruit baskets. Production began in 1924.

In 1925, intrigued by the glamour of plywood and the sales successes by various new mills, Mackall-Paine added a plywood plant to its shook operation, utilizing the ample space in the three-story building. Sid Cornish, with experience in a plywood plant at Vancouver, British Columbia, is understood to have planned the layout and supervised the installation. Plywood production began late in 1925. Door panels were the principal items, supplemented by drawer bottoms, auto stock, and trunk stock.

David Crockett was manager; Charles Jacobs, formerly plywood superintendent at Buffelen Lumber Co., Tacoma, was acting superintendent; Herman Tenzler, later head of Northwest Door Co., was sales manager; George Oman was auditor; and Jack O'Brien, shook lathe operator.

In November 1926, Al Anderson, who became prominent later as general manager of the huge Evans plywood plant in Lebanon, Oregon, came in as Mackall-Paine superintendent, Jacobs being retained as general foreman. log buyer then operating mostly along the Columbia. They were rafted in and secured to dolphins driven into the river bed. From the start, one of the unavoidable problems at the Vancouver mill was the tidal effect which caused the level of the Columbia River to vary from 15 feet to as much as 40 feet below the log deck. This required a vertical log lift up to the deck where a chain dragsaw mounted on a track cut the logs into blocks for both plywood (Douglas fir) and shook (spruce). Blocks were steamed for about 48 hours in steam boxes, after which they were debarked and then moved to the lathe for peeling. A series of floor-operated cranes facilitated moving the blocks for these operations.

Shook plant equipment

The principal equipment in the shook plant consisted of a St. Joe lathe with a 90-inch knife, a St. Joe automatic clipper, four stitching machines, four forced-air tunnel kilns, and a miscellany of small cutting items for tin basket tops.

Plywood equipment

The plywood plant in 1926 was a typical, well-equipped cold press operation, except that it was then, and still is the only three-story plywood plant in existence. The lathe was an 8-foot St. Joe, the clipper a hand-operated 104-inch St. Joe, and the veneer dryer a 12-foot wide, 3-line, 12 section Proctor. The first floor of the three-story structure had two Yates-American sanders, and areas for panel patching, storage, car loading, and shipping.

Dry veneer was conveyed to the second floor where it was graded (there was no veneer patching)*, then glued up and pressed into plywood panels. These were trimmed and cut to size with Globe Machine Company saws. There were two 48-inch wide Francis glue spreaders, and a 50-inch x 100-inch Francis cold press, with 100 psi capacity. A Laucks soybean glue was used.

*The high quality "peelers" in those days produced ample clear face veneer, while the maximum size of voids in core stock was largely a matter of the operator's conscience.

Logs were procured through Ray Stiger, an independent

Loas

On the third floor were two Francis glue mixers (directly above the spreaders), a veneer jointer and taping machine, and certain shook operations.

In other buildings there were a steam plant, an adequate machine shop, a grinding and filing room adjacent to the green end, a Williams hammer hog for converting mill waste into boiler fuel, and a small sawmill to cut cores into rough lumber.

In addition, there was a two-story building used for shook operations – stitching and storage. Later, in 1929, this building became a fabricating plant for plywood auto stock for the Ford Motor Company.

Apparently the Mackall-Paine Veneer Company with its shook and plywood operations was fairly successful. At any rate, Dave Crockett and George Oman figured it was a good opportunity for them. Accordingly, they arranged to purchase the plant from Mackall and Paine, and took over control on January 1, 1928.

At this time, Herman Tenzler (sales manager) and Al Anderson (superintendent) resigned to go with other plywood companies.

Crockett and Oman operated the plant as the Mackall-Paine Lumber Company until the fall of 1930, when Oman sold his interest to Crockett. Within two years, the plant was insolvent and forced to shut down for several months. It went into receivership in December 1932.

Crockett had been operating on a shoestring for some time, but he had a good reputation as a plant manager. He was able to form a new company with Fred Gram of Gram Finance Company, Portland; Ed Borcherding of Chicago as eastern sales representative; a Portland attorney, Albert Ridgeway, and Crockett, who continued as general manager when operations were resumed in July 1933.

Unfortunately, this was the period following the stock market crash in October 1929, when economic conditions were worsening throughout the world. In the United States, industry was slowing down and, as the Great Depression gripped the country, plant after plant was forced to operate only part time or shut down completely. Dave Crockett and his colleagues struggled through this period, although without much profit, and finally, by the winter of 1934, were ready to sell out. Fortunately they were soon able to find a buyer.

New Ownership

Frost Snyder was a native Tacoman. He had gone east to school, graduating from Yale in 1913. In World War I, he served as an Army Captain. After the war and for a number of years, Snyder, with members of his family, had owned and operated the Clear Fir Lumber Company in Tacoma. It had a sawmill and a door plant, but the sawmill had burned in 1934.

A friend of Snyder's, Bill Kilworth, owned the Tacoma Handle Company. Through his own efforts and the encouragement of William Allen White (both were from Emporia, Kansas), Kilworth had graduated from Princeton. He told Frost he was looking for another business in which to invest some extra money. When Frost heard that the plywood and veneer plant in Vancouver was for sale, and that two other companies, Dant & Russell and M&M Woodworking, were looking at it, he and Kilworth quickly teamed up as partners. In April 1935, they bought the Vancouver mill. Although neither knew much about plywood at that time, they were both capable and highly respected businessmen.

Dave Crockett agreed to continue as plant manager for a few months until a replacement was found. Before that happened, the employees organized a union and made demands which were rejected by the new owners. The plant was shut down six weeks before an agreement was reached.

Meanwhile, Al Anderson had returned to Vancouver Plywood and served for several months as superintendent. He left in the fall of 1935, when outside "efficiency experts" insisted on mill changes which Al knew were wrong.

When the plant resumed operations, Crockett left as general manager. On August 20, 1935, John Power, a graduate of Kansas University, was employed as Secretary, Director and General Manager, and remained in those capacities until his retirement in August 1954. One of the new



Log buyer, Ray Stiger

management's first moves was to divest the new company of some unprofitable sales connections, including a deal with one of the larger motor companies.

Equipment

Most of the machinery and equipment was old, having been installed by Mackall-Paine for the original veneer plant. The new owners took over Crockett's lease on this machinery, but before long purchased it all from Paine, including the original 4-foot box shook lathe operated by Jack O'Brien (later to become superintendent there).

In 1936, the new management started to improve the plywood mill by hiring a competent mechanical engineer, J.C. DePenning. The 4-foot lathe was soon moved to the box factory and, before many months, extra dryers, sanders and glue spreaders were added, which within a year significantly increased capacity and put the mill on a paying basis.

"The Timberman" in its annual plywood issue, December 1935, listed Vancouver Plywood Company with a 48 million feet annual capacity, two lathes, one 100-inch and one 96-inch, two dryers and a dry kiln. A year later, capacity was at 60 million feet. Industry production for 1936 was estimated at 700 million.

Gradually more new machinery and equipment replaced the old. By December 1939, Vancouver's capacity was estimated at 80 million feet, with three dryers instead of only two. A Jackson lathe was installed in 1940, but It was many years later before a 10-foot Merrit lathe was bought from the Wheeler Osgood plant when it was being liquidated in the early 1950's.

Originally, logs were run through steam vats, but Wheeler Osgood's development of the roller-pressure bar about 1928, with its improvement in peeling, led to an almost industrywide* discontinuance of steaming.

Beginning about 1950, however, steaming of logs was revived in a number of the newer mills to facilitate peeling of



John Power

lower-grade, knotty logs for core stock and sheathing, as well as producing smoother veneer for finish panels.

It might be noted that Vancouver Plywood consistently turned out good quality plywood. This was due partly to the purchase of high grade peeler logs and partly to a number of excellent lathe operators, such as Irving Hopfe, Thompson, H. Scholund, Jack Anderson, and "Frenchy."

Under management's policy of building from within, in 1936 Willard Wright was appointed chief of the lathe operations, and there his skill as a lathe operator and in peeling smooth veneer with a high recovery, plus his outstanding ability to train lathe operators, became well recognized. He retired in 1971.

Hot Presses

By January 1948, they were listed with three hot plate presses, but still with an 80 million foot capacity, although as of January 1951, the "Timberman" listed only two hot presses and one cold.

Log Lift

As already noted, logs for the plywood plant under Crockett's management were procured through Ray Stiger, an independent log buyer working on a commission basis.

When Frost Snyder and Bill Kilworth acquired Vancouver Plywood, Stiger continued on the same basis, buying mostly from large logging operations along the Columbia River where he could keep the mill supplied with high quality peelers.

Stiger foresaw, and the Vancouver Directors agreed, that the expanding plywood industry, especially in the Portland area, and throughout Oregon, would have to turn toward Oregon to meet its log demands and that it would be extremely advantageous if not necessary for mills to own their own timber.

To that end, Stiger and Power spent an ever-increasing amount of time with log producers, timber owners, the Forest

*Medford Products Company was at least one exception.



Service and the scalers working on the river, and Power served two terms as President of the Columbia River Scaling and Grading Bureau.

Vancouver Plywood, however, as long as Kilworth and Snyder retained their interest, continued to rely chiefly on Stiger for log procurement, although they did purchase several small tracts near Sweet Home, Oregon, and eventually acquired other timber holdings in Oregon.

In the late 1940's, Stiger in his quest for logs stopped at the Gardiner Lumber Company, Gardiner, Oregon, and spent a day with Hinsdale, owner of the company. He learned they were cramped financially and willing to sell part interest. He flew over the property and found out it included a well blocked-out area of timber and a first-class logging operation. Stiger returned to Vancouver and reported the opportunity to Snyder, Kilworth and Power. After further investigation and negotiation, Vancouver acquired a one-half interest for \$450,000, thus bolstering their sources for logs. Some years later, Long-Bell bought full ownership in the Gardiner operation at a price that gave Vancouver Plywood a handsome profit.

Sales

Art Gram (a brother of Fred) was sales manager but left in the summer of 1936. He was followed by "Pop" Warner who, during his two-year stay, helped design "Art-Ply," a decorative panel which enjoyed a brief popularity. Chet Harsch's Machine Works in Portland designed the machinery for it.

Perry Dame* joined Vancouver Plywood as sales manager in September 1938, and remained with the company until he retired in 1962.

The company sold consistently under a strict jobber policy as long as it operated the mill; that is, until 1955, when it was sold to the employees and became Fort Vancouver Plywood.

Soon after Snyder and Kilworth took over, Vancouver

Plywood established sales offices throughout the country, using as a nucleus a number of the Clear Fir Lumber Company's sales representatives. Placed in charge of field offices in strategic areas were:

Freeman Tibbets – New York

- S.W. Cornell St. Louis
- R.C. Frederick Houston
- Press Holliday Chicago

Others employed as office managers were:

- C.R. Ashton Detroit
- Ernest Barr Indianapolis
- D.C. Essley Southern California (L.A.)
- Lloyd Harris Northern California (Oakland)

Products

The big item at first was 4' x 8', 1/4" "Wallboard," an item which the industry developed in 1928 thanks mostly to Don Davis's initiative and to Ed Westman (see Monograph No. 11, "The Washington Veneer Company").

Cut-up items, especially for auto bodies, were also in demand for nearly a decade.

Later, as hot presses for producing Exterior type fir plywood were installed, "Vanply" turned more and more to this durable material and to scarfing panels in long lengths and in extra widths for use in boat building (manufacturing it, as did Harbor Plywood, in a minimum of five plys, even in 3/8" thickness), house trailers and other special applications.

Carloads of an important "waste utilization" item were produced for Longview Fibre and later for pulp mills when a chipper was installed to chop up the large volume of veneer clippings and plywood trimmings formerly sent either to the burner as waste or to the boilers for fuel. Vancouver never entered into a contract tying the material to any specific outlet.

Snyder's Prominence in Industry

Frost Snyder had been president of Vancouver Plywood for less than a year when, in 1936, despite his pleas of

*Perry has been living for a number of years in Laguna Hills, California. One of his neighbors is Ray Stiger, former log buyer, residing in South Laguna.

"inexperience with plywood," he was elected as the first president of the Douglas Fir Plywood Association.

But the industry knew him and he learned fast. Frost was one of the leaders at a meeting in the isolated Pacific Beach Hotel on the Washington coast where a suspicious and highly competitive industry group was persuaded to participate in a national sales campaign. It took a solid week for a half dozen plywood manufacturers to iron out their disagreements. The resulting sales promotion contract, which all the DFPA mills finally signed in November 1937, was the key to the development of a strong industry association. This contract, which had been carefully drawn up by the brilliant Seattle attorney, Alfred J. Schweppe, paved the way for the tremendous plywood expansion beginning in 1938 under the leadership of DFPA's newly appointed Managing Director, W.E. Difford. It was also a basic factor in the future prosperity of the fir plywood industry.

When World War II suddenly broke on the country, industrial mobilization – including the fir plywood industry – went into high gear. Experts from scores of large companies and pertinent trade associations were appointed to the War Production Board to assist in the mammoth procurement problems. Frost Snyder, who was the choice of the DFPA's Management Committee, was appointed by the WPB in Washington, D.C., as a "dollar a year" technical consultant to coordinate fir plywood production and purchases with the armed forces requirements.

Plywood was in great demand, especially for packaging, personnel shelter, and boat construction by the Armed Forces, but in addition for a seemingly endless variety of vital uses.

This war-time job was no sinecure. It required an intimate knowledge of the industry with its scores of mills, but equally important, the confidence of their executives. Their confidence in Frost Snyder was amply justified. The plywood industry cooperated magnificently by sending him confidential statistics on their order files and production capabilities. With such detailed data, Snyder was able to distribute orders so that government priorities were observed efficiently and quickly, and mill production maintained at a maximum.

Frost was determined to run the difficult job for the best interests of the war effort and with absolute impartiality toward all mills. In talking with John Power about this difficult period, Power remarked, "Frost was absolutely fair in his allocations, almost at times seeming to lean over a little backwards when Vancouver was involved, and sometimes when he handed us one which he knew was a tough, unprofitable one, Bill Kilworth and I would go into a huddle about it. But we always wound up concluding that we had to back Frost up, and also, we were always proud of the job he was doing." There was never any criticism of his stewardship.

Many difficulties naturally arose. On one long list of urgently needed plywood items, there was a particularly tough one because of the specifications as to maximum thickness of veneer, in extra-thick panels, in special sizes, and of Exterior type. Only a few mills were in a position to produce such an item and these were already filled with important orders.

But one sales manager, dubiously scanning the list of materials, said, "There's only one item we could take now." To Frost Snyder's delight, that item was the "toughie" no one else would touch.

After World War II

In the decade following the second World War, fir plywood was about the fastest growing industry in the country, with new mills appearing on an average of almost one every other month. The push was southward to Oregon and California where timber was plentiful and cheaper. Existing mills expanded their production with extra veneer-drying capacity – the proverbial bottleneck – and additional presses, with a strong trend toward hot presses for both Interior and Exterior types. Improved quality control procedures, plus various mechanical innovations, led to a product that had a continuously increasing nation-wide acceptance for both construction and industrial uses. Although a very few mills "dogged' it under the umbrella of the industry's good reputation, they were never too serious a factor and most

specifying consumers soon learned to differentiate the wheat from the chaff.

Vancouver Plywood, blessed with a source of good quality logs, consistently maintained a high standard in its products. It is true that some thirty-odd years ago, when a "special" adhesive was being required for concrete forms and a question of quality may have arisen, one of their production executives told the author, a bit disdainfully, "Hell, I can spit in it and it becomes a 'special' glue." But if he did, the effect was evidently satisfactory as they continued to produce acceptable Plyform.

Vancouver Plywood grew along with the industry, cooperating with it and sharing its problems, improving machinery and methods and venturing a bit into Oregon, for timber, as previously mentioned.

In 1954, their general manager, John Power,* retired and Snyder's son-in-law, Bob Kendall, son of a distinguished mid-western lumber executive, was appointed to the job. He had been employed a year before by Power, but Kendall died suddenly within a few months after his appointment.

Meanwhile, Stiger persuaded Snyder and Kilworth, along with Kendall, to inspect a 140-acre farm in Springfield, Oregon, which Stiger wanted them to buy as a site for a veneer plant and a 40-acre log pond. Management agreed almost immediately. Stiger built the pond, and the company built the green end which proved to be a "late blooming" bonanza.

The next year, 1955, Frost and Bill Kilworth decided to sell the plywood plant and offered it to the 400 employees at \$4,500 a share. The sale was consummated, the mill name was changed to Fort Vancouver Plywood, and a new and, as it proved, most profitable co-op worker-owned company took over. Part of the deal was a five-year sales contract with Vancouver Plywood, under Snyder and Kilworth, to handle all their sales.

The Vancouver Plywood (or Vanply) Company also operated as a sales agent for several other mills, including North Pacific Plywood in Tacoma, Astoria Plywood, and Tillamook Plywood. In addition, they continued some logging in Oregon and also their Springfield veneer plant, not included in the sale to Fort Vancouver.

A few years later, Vanply acquired two smaller Oregon plants, Hub City Plywood and Twin Sisters Plywood. In 1962 Perry Dame, after 24 years as sales manager, retired, and David Difford, younger son of W.E. Difford, was appointed in his place. In the early 1960's, Vanply, in cooperation with Evans Products, built a large, modern plywood plant a few miles west of Missoula, Montana, peeling mostly lodgepole *Now living in Seattle pine and some Inland Empire Douglas fir. After a few years, however, their half interest there was sold to Evans Products.

Bill Kilworth died in 1964, and some years later (1968) Frost sold Vanply to Skelly Oil Company, Frost passed away on December 6, 1971.

Fort Vancouver Plywood Company

Meanwhile, the co-op organization, Fort Vancouver Plywood, took over the operation of the plant. Irvin L. Hopfe was the first president, with Henry Dotter, Jr., whom Power had brought from Pennsylvania State Forestry School to develop costs, procedure, and valuations, as general manager of the plant.

As with other plywood co-ops, production per man-hour increased since everyone was a stockholder and personally interested in efficiency and profits. By January 1956, production was up to 100 million capacity, including "white pine, spruce, and Douglas fir, and as special products, one million feet of T&G sheathing, and two million feet of boat-hull and scarfed panels."

In 1958, they hired as general manager a veteran plywood producer, Vern Nyman, with years of experience at Aberdeen and Olympia Veneer and Associated Plywood. Vern retired in 1965 and a year or so later, Elmer H. Hall, another plywood veteran, came back as general manager where he had started in 1923 when Phil Wiseman was plant superintendent.

Under co-op management, the plant capacity has been expanded from the 100 million feet annually in 1955 to 150 million in 1971.

At Fort Vancouver, plywood is produced in thicknesses up to 1-3/4-inches, in sizes up to 60-inch widths and 42- foot lengths, in practically any standard grade, all bonded with DFPA-approved exterior type adhesive.

The long lengths, of course, are scarfed, on a 1-to-8 slope, and are in great demand for boat building.

During the past several years, Fort Vancouver has been carrying out a \$1-1/4 million improvement program, under a progressive Board of Directors, with Elmer Hall as both general manager and sales manager, and Albert Dartt as mill superintendent.

Board members are:

Marvin Pelky – President Laurence Malloy – Vice President Stanley Swanson – Secretary John Cvetich – Treasurer

Fort Vancouver Plywood today is a splendid example of a successful "co-op" plant.