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Introduction

This installment is the next-to-last in our series of regional bibliographies that have covered the Great Lakes (*Transfer* No. 9), East Coast (*Transfer* No. 10 and 11), Rivers and Gulf (*Transfer* No. 18), Golden State [California] (*Transfer* No. 27) and Pacific Northwest (*Transfer* No. 36). The final installment, "Miscellaneous," will be included with *Transfer* No. 44. It was originally our intention to begin the cycle again, reissuing and substantially upgrading the bibliographies with the additional material that has come to light. However, time and spent energy have taken their toll, so future updates will have to be in some other form, perhaps through the RMIG website.

Given the global scope of this installment, I have the feeling that this is the least comprehensive of any sections compiled so far, especially with regard to global developments in the last thirty years. I have to believe there is a much more extensive literature, even in English, of rail-marine material overseas than is presented here. Knowing the "train ferry" (as they are called outside of North America) operations in Europe, Asia and South America, there must be an extensive body of non-English literature about these of which I am ignorant. However, as always, we publish what we have. Special thanks goes to Bob Parkinson for combing 80+ years of English technical journals. Moreover, I have included some entries here that may describe auto ferries and not car ferries, but since I have not seen some of the articles I am unsure; I have shared Bob's judgements in places. Consequently, the format and informational content of the entries are more uneven in this installment than in previous ones. Rather than take the additional time to search out the publications that I have cited but not seen, I feel it is more important to cite the questionable entries and revise later. As with earlier bibliographies, write-ups and commentary are by the editor except where noted. I welcome correspondence to amplify or correct the listings. Another disclaimer: over the years, *Steamboat Bill* in its regional news columns has cited newbuildings, mishaps and scrapplings of overseas car ferries. During the run of *Transfer* I have tried to pick these up in our News section, but I have not included citations of these blurbs in this Bibliography. Also, ideally, it would be nice if the information here were reindexed in alternative formats, say, by region and by vessel. I will be happy to provide an electronic version of this material to anyone who wishes to do so.

If there is any single source cited here that epitomizes the "ideal," it would be P. Ransome Wallis' *Train Ferries of Western Europe*. This book comes as close as any I have seen to the "Hilton model," namely including plenty of illustrations, maps, vessel drawings, track arrangements, vessel descriptions and corporate histories. Unfortunately, it is badly out of date. As far as the best single source of a survey of the entire overseas subject, the work that comes closest to the optimal is that of E.E.R. Tratman. Again, it is badly out of date. There seem to be a number of interesting citations published in German, none of which I have personally seen; at the same time, when visiting a fairly extensive railway bookstore at the Bochum-Dalhausen Railway Museum in 2001, I specifically looked for rail-marine material and came up empty handed, so I guess the subject of rail-marine is as obscure worldwide as it is in the US to the general rail or ship enthusiast.

A final introductory note: Train Ferries vs. Car Ferries--For the most part, powered vessels that carry railway equipment are referred to as "car ferries" in North America, while they are referred to as "train ferries" elsewhere. As George Hilton is always quick to point out, the issue is twofold. First, when powered railway-carrying vessels were initially put in service, the word "car" meant railroad car. Automobiles, today's "cars," did not exist. Secondly, and I think less important, is the rulebook definition of a train, "An engine or more than one engine coupled with or without cars, displaying a marker(s)." Since most "car ferries" do not carry trains in the foregoing sense of the word, George feels they should not be called "train ferries." However, there are a lot more auto ferries in service than train or railcar ferries, so the use of the word "car ferries" has come to mean auto ferries in contemporary parlance. Moreover, a lot of these overseas ferries did and do carry entire trains. For stylistic purposes, I have tried to be faithful to George's distinction for most of the content of *Transfer* which mainly deals with North American rail-marine subjects. However, for the purposes of this bibliography, I feel it is relevant to embrace the words "train ferry" which I have used interchangeably with "car ferry."

BOOKS

Amin, Mohammed; Willetts, Duncan; and Matheson, Alastair. *Railways across the Equator*, Boadley Head Ltd., 30 Bedford Square, London, 1986. Chapter 6, pages 132-143 is titled "The

old and picturesque Lake Steamers-Lake Victoria Ferries," and contains pictures of rail ferries *Umoja*, *Uhuru*, both 300' long and *Kaawa* and sister ship *Kaawa Trader* which have a 20 rail wagon capacity with 4 tracks. These were used between Junja and Mwanza, Tanzania in the 1980s mainly for coffee exports.

One double page picture is a stern shot of 4-track *Kaawa Trader* at the transfer bridge and a stern view of the 4-track *Umoja* setting off. These are very modern, nice looking ships.

Baker, R. Et al. *Selected Papers on British Warship Design in World War II from the Transactions of the Royal Institution of Naval Architects*, Naval Institute Press, 1983, pages 11-15. Describes and illustrates the WWII conversion of early cross-channel train ferries to "Landing Ship Sternchute."

Barnichon, Gilles and Noirel, Didier. *Les car-ferries construits en France (French Built Car Ferries)*. Editions Marcel-Didier Vrac, (rue de la Choquette, 38660 Le Tourvet, France). 1996. 120 pp. FF140 (paper). This information comes from a review by Paul Tully in the Summer 1997 *Steamboat Bill*. In context it appears that "car" here is "auto" not railcar.

Behrend, George and Buchanan, Gary. *Night Ferry*, Jersey Artists, Ltd., St. Martin, Jersey, Channel Islands, Great Britain, 1985. This book is subtitled, "A tribute to Britain's only international through train, 1936 to 1980." and it certainly is that. 136 pages include index, diagrams of the passenger cars and locomotives, terminal drawings, lots of photos and complete roster showing disposition of every piece of rolling stock used in the service. A treasure.

Boot, W.J.J. *De tramboten van de RTM en haar docterondernemingen (The Rotterdam Tramway Company and its subsidiary lines)*, 1983. Reviewed on page 17 of *Transfer* No. 16, it includes aspects of this fairly short-lived operation that had small floatbridges and was made redundant by the Dutch government's Delta Flood Control Project after 1953. Published in Dutch. Key sections were photocopied for me by member Paul Lipiarski and translated by his wife. Paul notes that the book has black and white photos and drawings of the rail and passenger steamships connecting the islands in the province of Zeeland.

Brown, D.K. RCNC, ed. *The Design and Construction of British Warships 1939-1945 The Official Record Landing Craft and Auxiliary Vessels*, Conway Maritime Press, 1996. Pages 68-69 describe conversion of *Train Ferries 1* and *3* to Landing Ship Sternchute (LSS) in WWII.

La Citra e il Mare-La storia l'attrivia marittima e la costruzione de front a mare de Reggio Calabria Scilla riva dello Stretto. A ? Di Renago G. Lagano, rom, gangemi editore, 1988. (The foregoing was transcribed from semi-legible handwriting so sorry if the Italian is a little scrambled.) *The City and the Sea*, subtitled: History of maritime affairs and the construction of the sea front of the city of Reggio-Calabria on Italian mainland at the Strait (of Messina). I have two sets of photocopies of assorted pages of this book with images. There is no text to speak of on the copies I have other than the captions in Italian. The copies include photos of several small rail ferries and silhouette outboard profiles with specifications of the 1905 vessels *Calabria* and *Sicilia* (sidewheelers) and the

1910-1922 vessels (propellor) *Reggio*, *Villa* and *Aspromote*. There is mention of an earthquake in 1908, after which apparently there were some changes in the facilities or service. Maybe Kathy will get me to Italy so we can check this out firsthand.

. *Dampfschiffe auf de Schweizerseen*. No publication data. Plate 15 shows a single track screw propelled steamer which apparently operated between 1885 and 1894 transporting railcars to a chemical works located on Lake Zurich.

De S. Winser, John. *British Cross Channel Railway Passenger Ships*. This book concentrates on the 53 passenger vessels owned by the British Railway companies in the period from the end of WWI through the next six decades. While there is extensive coverage of the railway pocket liners, coverage of train ferries is limited to page 75 which has two black and white photos of *Shepperton Ferry* and *Suffolk Ferry*.

Detlefsen, Gert Uwe. *Die Schiffe der Eisenbahn*, Urbes Verlag Hans Jurgen Hansen, Munich, Germany, 1993. German language. I have not seen this book.

De Rodakowski, Ernest., compiler. *The Channel Ferry*, Harrison & Sons, London, 1905. This book was "originally collected and compiled in order to meet Parliamentary enquiry into the merits of the Channel Ferry Bill." It contains a lot of historical background as well as a then-current survey of existing operations in Europe and North America. Quite a few statistical tables, some tipped-in illustrations.

Flayhart, William Henry, III, *The American Line, 1871-1902*, W.W. Norton, New York, 2000. This is the history of a steamship line that was formed by the Pennsylvania Railroad to try to stop loss of trans-Atlantic business by the Port of Philadelphia to New York. The line built four identical and handsome screw steamers, *Pennsylvania*, *Ohio*, *Indiana* and *Illinois*. The PRR's involvement in this story is more or less rail-marine on the fringe, but the book is well done and is cited for the record. Reviewed in the Spring 2006 issue of *The Keystone* (PRRT&HS).

Flotten parade Thuner-und Brienzersee," published 1979 by Berner Alpenbahn Gesellschaft, Bern-Lotschberg-Simplon. Pages 28-29 have data and bow-on photo of single-track, 42m long steam powered ferry *Trajektschiff II*, apparently operating on Thunersee in Switzerland from 1872 to 1895.

Gardiner, Robert, Ed. *The Shipping Revolution: The Modern Merchant Ship*. Naval Institute Press, Annapolis, 1992. Page 88 discusses contemporary buildings of train ferries and page 100 has a table of 8 "Typical rail ferries since 1945."

Gazzetti, Gianluigi. *Treni e Navi*. Rome (Ferrovie Italiane dello Stato), 1955, 70 pages, Ill. Bibl. Fleet list. Paper, original price was 300 lire. This book, written in Italian, covers the vessels and routes in Italy, an early and present user of car

ferries. A brief review did not turn up in *Steamboat Bill* until the Summer 1962 issue. I have not seen this book; next time I am in the SSHSA Library at University of Baltimore I'll have to check this one out as review copies for *Steamboat Bill* at least used to go to the library.

Hasenson, A. *The Golden Arrow*. Howard Baker, London, 1970. Subtitled "The full story of the great train with 32 photographs, many maps and timetables," this book could arguably be considered rail-marine on the fringe. It is about a boat train from Victoria Station that ended at the pier without the rolling stock going aboard. However, it is very well done (good graphics, photos and great appendices), and I bought it at the same time and from the same dealer as Behrend above, so I figured I'd might as well mention it. Also see Middleton and Spark in Articles.

Hader, Arnulf and Meier, Gunther. *Eisenbahnfahren der Welt*, Koehlers Verlagsgesellschaft mbH, Herford, Germany, 1986. German Language. This book is not in my collection, but the title certainly sounds comprehensive and promising. Cited by Art Chavez in his review of the Kings Line models in *Transfer* No.34.

Hendy, John. *Saint-Germain--Vintage Train Ferry*, Ferry Publications, Staplehurst, Kent, England, 1990. This book, reviewed in *Transfer* No. 23, p. 44, homes in on one of the last English Channel train ferries. The 32 pages are filled with black and white photos and there are color front and back inside and outside covers.

Ikeda, Yosihiko and Takeda, Taiki. *Car Ferries of the World* '88. Published by Yoshikiko Ikeda (1-791-420 Uenoshiba-Mukoogaoka-cho, Sakai, Osaka 593 Japan), 1988, 186 pp. The following were Ken Blume's comments in his review in the Winter 1988 *Steamboat Bill*: "This survey covers 29 nations and over 300 car ferries. For each vessel, the book includes basic technical information, a one-sentence description, and, in most instances, a black-and-white photo. The volume also includes lists of new buildings, lists of present and former ship names, and lists of ship owners and operators. The text is in both English and Japanese." The problem is, I am not sure whether in this case "car" is "autos" or "railcars." I have not seen this book.

Jeannernaire (sp?), Claude. *Schiffahrt auf dem Viervaldstättersee Lake Lucern Navigation (sp?)*. No pub. data. My source is a hard-to-read hand-written annotation on seven photocopied pages from this book that apparently describe a number of single-track, open car ferries that operated on Lake Lucerne in Switzerland, *BB1*, *BBII*, *DGV1* and *DGV2*.

Also, by the same author: *Mit Kohle, Dampf und Schaufelrädern*. I have only photocopies of four pages with photos and data on *BB1* and *BBII* and deck plan and outboard profile of *BBII*.

Jensen, Niels. *Danske Jernbanefærger*, Clausen Boger, Aschehoug, Kobenhavn, Denmark, 1978. Danish language. Not in my collection.

Kramer, Wolfgang; Kramer, Reinhard; and Foerster, Horst-Dieter. *Die Schiffe der Königslinie*, VEB Hinstorf Verlag Rostock, Germany, 1981. German language. Not in my collection but cited by Art Chavez in his review of the Kings Line models, *Transfer* No. 34.

Railroad Ferryboats, Tokyo (Railroad Map and Book Publishing Society, Nippon Bunrenkyokai Bldg.), 1957, 136 pages, Ill. Paper. This little book showed up as a thumbnail review on page 59 of the Summer 1959 issue of *Steamboat Bill*, along with Gazzetti's *Treni e Navi* above. Covers the "train carriers and ferry routes within...national boundaries and...has an important story to tell, since...Japan's geography has made her one of their primary users." Until bridges and tunnels of some years later, that is. Text in Japanese. I have not seen this book.

Ransome-Wallis, P. *Train Ferries of Western Europe*. Ian Allan, Ltd., Shepperton, Surrey, England, 1968. As noted in the introduction, this 289-page book is loaded with histories, maps, vessel photos, some arrangement drawings, and operational descriptions. I consider this book another one of my core holdings.

Schwadtke, Karl-Heinz. *Fähren-Ferries*, 1965. This charming book contains small outboard elevation drawings of worldwide ferries and a little coded table of specifications. Unfortunately, not only is the book very rare, but it was far from comprehensive when it was published and is now, of course, outdated. Some years ago I heard rumblings that someone was contemplating doing an up-to-date version.

Shipping Wonders of the World, Part 54. "The New Channel Train Ferry--Dover-Dunkirk Train Ferry," pages 1724-1728. Pages 1724-1728 include a photograph of the tidal dock at Dover where "the train ferry is raised or lowered to the level of the railway lines on the quay."

Stott, Bob. *The Cook Strait Ferry Story*. Southern press Ltd., Wellington, New Zealand, 1981. 48 pages. Descriptions and photographs of services and vessels carrying rail traffic between New Zealand's two islands. Up to date as of publication, but there have been further changes. No vessel drawings.

Talbot, Frederick A. *Railway Wonders of the World*, Cassell and Company, Limited, London, New York, Toronto and Melbourne, no date. Pages 170-174+ are entitled "Floating Railways--II The Gigantic Ferries of Europe and Asia." They describe Baltic and Lake Baikal operations.

Tratman, E.E. R. "Railway Car-Ferries, American and Foreign," *Proceedings of the American Railway Engineering*

Association, March 12, 13 and 14, 1940, Volume 41, pages 965-1031. "Part III, Foreign Railway Car-Ferries," begins on page 994 and continues to page 1010. In addition, Part IV, "Landings," pages 1010-1030, includes examples of overseas installations in the overall discussion of the various types of landing arrangements. Tratmans's treatise is a brilliant classic, covering historical operations as well as those extant at the time of his writing, and if one were writing a current definitive text on rail-marine, his work would be the suggested beginning, only needing to be updated and ideally enhanced with more illustrations (both of which could easily quadruple its size!) I thank member Louis Saillard for sending me a copy of this chapter; several years later I was able to obtain an original volume of this issue of the *Proceedings* from a surplus sale held by the Kalmbach Memorial Library in Chattanooga. The 1940 paper was an update of *AREA Bulletin No. 387*, dated July 1936 for which I thank non-member Bill Howes for sending me a copy. I don't know if Tratman ever did another edition after 1940.

Wageman, Ingemar. *Trelleborg-Sassnitz 1897-1945*. Sweriges Filatelistforbund, Stockholm, Sweden, 1990. Pages 27-38 contain material on the Kings Line, cited by Art Chavez in *Transfer* No. 34.

Widdoms, Nick. *Car Ferries of the British Isles, 1994*. No publication data. Page 102 has data on *Nord Pas-de-Calais*. This book appears to be mainly on auto ferries.

ARTICLES

"54 die, 9 saved as ferry capsizes off Germany—Disaster is linked to shift of rail cars," *Baltimore Sun*, January 15, 1993. This Reuters news report covers a wreck during a Baltic Sea storm on January 14 of the 412-foot Polish "combi" ferry *Jan Heweliusz*. This 1977-built ship operated between Sweden and Poland.

M. V. Abegweit (ii). *Shipbuilding & Marine Engineering International*, March 1983, page 107. Description of new-built, beastly-looking Prince Edward Island double-ended rail and auto ferry with deck plans and outboard elevation. Notice of *Abegweit's* scrapping appeared in *Transfer* No. 42.

Abell, Sir Westcott S. "Channel Train Ferry Steamships for the Southern Railway," *The Shipbuilder and Marine Engine Builder*, date not visible, 4 pages, numbers not visible on photocopy (ca. 205?). Description of *Twickenham Ferry* with table of specifications, midship section, flooding diagram, outboard profile, and deck plans.

"Aratere boosts inter-island service." *The Motor Ship*, January 1999, pages 40-43. Describes this 1998-built diesel-electric New Zealand railcar and auto ferry. Cited in *Transfer* No. 26.

"Das Bauvorhaben Vogelfluglinie," *Schiff und Hafen*, August 1962, pages 674-683. This German article describes the train

ferry service from the German isle of Fehmarn to the Danish isle of Lolland across the Fehmarn Belt. Plenty of maps, photos and a Puttgarten site plan. Discussion of construction of the breakwater.

"Buenavista," *Marine Engineer and Naval Architect*, October 1971, pages 426-428. Describes the newly built 2800 ton Norwegian passenger/auto/rail ferry (two tracks, stern loading gauntleted rail boarding) with outboard elevation, deck plans and engineroom arrangement.

"Canadian Car Ferry—Description of the British-Built Steamer Intended for Service Between Quebec and Levis," *The Marine Review*, November 1914, pages 405?-406. This is the bizarre "elevator deck" steamer *Leonard* that went back to England later. See also citations in Lakes section of Bibliography. This piece from the trade literature is being cited here because *Leonard* went back across the Atlantic to the Channel for WWI service.

"Car Ferry and Landing Projected for Yangtze-Kiang china," *Engineering News-Record*, V. 109, July- Oct. 1932, page 492, 3" of material covers ferry between Pukow and Nanking on route, Pekin-Shanghai. Contracts awarded for landing spans to an English company.

"Car ferry for an African Railway," *Engineering News-Record*, Oct. 30, 1924, page 720 one column, Nigerian Eastern Ry., Benue River described.

"A Chain ferry with steamboat and barge across the Rhine at Elton Germany near the Dutch border on the rail line between Cleve and Zevenaar." *Engineering* [London], V. 10 Sept. 2, 1879. Pages 166-167. Fig. 1 Side view of steamboat. Fig. 2, End view of steamboat with barge on each side, 6 cars on barge. Side wheel on each side of the boat for the chain on the bottom of the river. Fig. 3, Top view. Single track on each barge. Fig. 4, Profile of cross channel. Each barge can carry 7 goods wagons or 5 passenger carriages. Figs. 1-13 show fittings.

"Channel Train Ferry Steamers for the Southern Ry," *Engineering* [London]. V. 139, April 19, 1935, pages 426-429. Paper read before Instn. Of Naval Architects, April 11, 1934, abridged. Some detail drawings, April 19, profile & deck, Apr. 26, page 448

Chavez, Arthur. "The Design of Railcar Fastenings Used in Worldwide Train Ferry Operations." *Transfer* No. 38, pages 11-16. This article broadens the scope of the subject from the Great Lakes covered in *Transfer* No. 36 to worldwide.

Cone, P.J. "Farewell to the Train Ferry," *Ships Monthly*, February 1996, pages 12-16. Subtitled "reviews the long history of Cross Channel train ferry services which recently bowed out to the Channel Tunnel." Cited in *Transfer* No. 21.

"The Construction and Operation of a Temporary Train Ferry

on the Orange River at Upington, South Africa," *Engineering* [London] Sept.7, 1917 pages 265-266 This was selected from papers reproduced in the *Proceedings of the Institution of Civil Engineers*.

"Contracts Open—Railway Ferry over the Ganges." *The Engineer* [London], V. 63, March 11, 1887. Pages 198-199. Text plus full page of drawings and detail. "Bridge made as pontoon." Boat docked sideways. One track to turntable on boat to 3 tracks each end. One end 2 long cars x 3 = 6 ; May 11, 1887, conclusion. Bob Parkinsosn offered sketch of deck plan with 4 cars on outboard 2 tracks, 3 on center track. "11 short cars."

"Cross channel Car-Ferry service reinaugurated," *Engineering News-Record*, Vol. 93, July 17, page 197 3" of material.

"Cross sound ferry str. KJØBENVN," *The Engineer* [London] p. V. 84, July 23, 1897 pages 88, 89 inboard profile, plan of upper deck (2 tracks, plan of lower deck.

"Dänische Arbeiten an de Vogelfluglinie," Schiff un Hafen, April, 1963, pages 363-365. This German article apparently supplements "Das Bauvorhaben Vogelfluglinie" cited above with more details of the works on the Danish side of the route on Lolland.

"Danish Motor Train Ferry Korsør," *Engineering* [London], V. 119 Jan 13, 1928, pages 42-44. Many plans & plates.

"The Danish Motor Train Ferry Korsør." *The Engineer* [London], V. 143, June 3, 1927, page 610, Side views, text, 3 tracks, recessed so that motor cars can be carried.

"Danish Steam Ferries." *Engineering* [London], V64, July 16, 1897, pages 88-90. Table I, Belonging to the State Railways of Denmark. Gives names, dates, builder, number of tracks, whether paddle or screws, dimension, speed, wt., no. of wagons to be carried, cost. Table II, Icebreakers (some owned by State Rys.) 2 page plate between pages 80-81.

"Danish Steam Ry. Ferries and Ice Breaking Steamers," *The Engineer* [London], V. 84. July 23, 1897, pages 88-90 Paper by Capt Tuxen. See other references to *Sleipner*. Also, V. 84, July 23, 1897 page 88, has inboard profile of icebreaking *Sleipner*, Burmeister & Wain, Copenhagen, Engineers. NOT a Train ferry. page 90 small deck plan of ice breaking steamer *Sleipner*. Table I has 15 carferries & data. Table II has 6 ice-breakers, not car ferries. *Sleipner* not in Table I, in Table II. Table I also shows number of wagons to be carried.

"Danmark," *Engineering* [London], V. 116 Oct. 19, 1923. Plate between pages 498-499. Profile & deck plans (5), p. 507 text, 1/2 page. 3/4 photo view.

"Danmark"—largest European train ferry," *Marine Engineer and Naval Architect*, July 1968, pages 264-265. This is a

Danish ferry. Article includes outboard elevation and some deck plans although none of the rail deck.

"Diesel Rail Car Ferry for South America," *Motorship Manual*, 1927, page 44. Describes *Dolores de Urquiza*, built for Entre Rios Railway of Argentina. See *Transfer* No. 42. Under-way photo, outboard elevation and deck plan.

DSR Stmr. Prins Christian, *Engineering* [London] Sept. 10, 1909, pp. 345-347 pages 344-347 plans.

"The Dover dock for the Channel Train Ferry Service," *Engineering* [London], V. 142, July-Dec. 1936, , pages 390-392, 5 Figures.

"Eisenbahnen im Ostseeraum." Theme title of issue of *Bahn Profil* 5, March-April 1998. This issue, in German, with at least 49 pages of relevant content, features the train ferry service in the Baltic, to a degree updating the chapter on the same subject in Ransome-Wallis. Even includes an article on the new bridge construction that preempted some of the historical ferries. It's a pity my technical German is no longer good enough to enjoy what appears to be a very informative issue. Text, historical and contemporary photos but no drawings. Cited in *Transfer* No. 29.

"Emergency repairs to Continental Ports." *Engineering* [London] V. 164 Oct. 10, 1947, Fig. 1, Dieppe; Fig. 2, photo train ferry terminal; Pages 337-338, 348. Oct 24, pages 385-387, Ostend Nov. 7, pages 433-434 Boulogne map & photos. page 44, photos Nov. 21, 1947, pages 481-482 Calais

"English Channel Train Ferry Bridge of 120 foot span." *Engineering News-Record*, V. 83, Oct. 2, 1919. Details of the trusses, lifting tower, operating apparatus and mooring provisions. Special Design Features, by P. J. Risdon, Hove, Sussex, England. II. Ferry Bridge Operating tower and Channel Boat moored in place, photo. II. End panels of 120-foot trusses—details of floor beams, pivot pin and 'elephant foot' bearing" il. End views of tower—supporting and operating details. Refers to 4 routes from England to France beginning in 1918.

"Fährhafen Puttgarden in Nenngrösse Z," *Marklin Magazin*, March 1978, pages 17-21. Describes construction of a Z-scale version of the Baltic ferry terminal at Puttgarden using the Wilhelmshaven 1:250 scale card models of the ferries *Deutschland* (which is close to the 1:220 of Z). Also in the same issue: "Das Vorbild: Fährhafen Puttgarden mit Beschreibung der Fährschiffe." Excellent article describing the prototype with general arrangement views of ferries *Deutschland* (ii) and *Theodor Heuss*. Both of the above are in German, of course, so you will have to break out your *Brockhaus*.

"A Ferryboat with an elevating Deck, *Finnieston No. 1*." *Engineering News*, V. July 22, page 105 See also *Scientific*

American July 17, 1909 for photos in service. Built at ??? Glasgow. Vehicles. Not a train ferry.

"A Ferry Story," Parts 1, *Model Rail (UK)*, Nos. 71 (September 2004), pages 40-42. Covers a short series of operations features on train ferry and international train operations before the Channel tunnel. No. 72 (October 2004), pages 32-37, "Night Train to Paris," Part 2 of the series covers the Night Ferry sleeping car express which ran until 1980 and No. 73 (November 2004), "Ferry Story, contd.," Part 3 has more details about the train ferry service.

"The Ferry at Rhinehausen-Osterath and Essen Ry." *The Engineer* [London], V26 July-Dec 1868 Aug 7, 1868, Pages 106-108. A great picture. Outboard profile with 5 passenger cars & guard van. Side view with loco, pulling off 3 gondolas. Also many figures with details. Not in Ransome-Wallis.

"Ferry Steamer *Lillebelt*," *The Engineer* [London], V. 34, Dec. 6, 1872. Pages 384-385 Inboard profile, with cars, engine, 2 freight or baggage vans on floatbridge, passenger car and guard van on boat. Plan of car deck. Scale of feet, capacity 6 loaded railway wagons as well as 400 passengers. Article says oscillatory engines. C.FR-W. And fold out plate, Side wheeler, three full color, tissue. Plate shows engine to be oscillating. Passenger 1st Cl. Saloon. Ladies cabin, 2nd and 3rd class space. All below main (car) deck. 100 1st class and 2nd cl., 300 3rd cl.. "The fifty sixth of our portfolio of working drawings."

"Ferry Steamer Lake Baikal and Siberian Ry.," *The Engineer* [London], V. 82. Oct. 16, 1896 page 385 Artist's drawing, starboard side view with cutaway showing 5 wagons on train deck. Also,

V. 83 June 4, 1897 Supplement and Test Views (2 pages) on the Trans-Siberian Ry. (Did not show train ferry)

Finnieston I and II. Bob Parkinson came across numerous references in the English literature for these ferries with elevating decks for operations in Glasgow. As near as can be determined, these were not used for rail service. Vehicles only. "Elevating Deck Ferry Steamer *Finnieston* constructed by Messrs. W. Simons and Co., Engineers, Renfrew. *Engineering* [London], V50, Sept. 5, 1890, page 275 3/4 view, abaft without cars. Cross section shows 2 tracks. Text, page 276-277 (2 columns): 4 screws, *Finnieston* in Glasgow Harbour. 80' x 43' steel, length of run is 470 feet. Also, page 7. Vol. 50 July-Dec 1890; Pages 276-277, 2 cols. Equiv. Sept. 5, 1890. The Patent Elevating Deck Ferry Steamer 'Finnieston.' Has an elevating deck, horses, vehicles, railway wagons at Finnieston, Glasgow Harbor. Double end, 2 screws each end, l. 80' br. 48'. Steel hull, iron decking. Elevating deck l. 78' br. 32'. Capacities, 300 persons+/-; plus 8 loaded carts with horses or 300+ passengers plus 4 loaded lorries and 3 loaded carts. Or 600 or 700 passengers only. Two lines of rails or railway wagons. Distance is 470 feet, quay to quay. Official trial was on July 16. No indications that it had yet been used or proposed

for rail cars. Drawings page 275. 3/4 port view, no passengers or vehicles visible. Section view, however, shows 2 rail wagons aboard. Not in Ransome-Wallis. Also, see Vol. 86, p. 221, in July-Dec. 1908 for what was apparently a second (successor) Ferry Str. *Finnieston* for Glasgow Harbour, also not in Ransome-Wallis.

More in *Engineering*, V. 86, August 14, 1908, page 221. By now no more mention of railcars.

Flayhart, William Henry III, Ph.D. "Stars and Stripes on the Atlantic: The American Line 1871-1902," *Steamboat Bill*, Spring 2002, pages 18-34. This article is the short version of the story told in the American Line book cited above.

"Garibaldi—a unique 3-deck Italian rail ferry," *The Naval Architect*, May 1983, pages E145-E147. Provides specifications, profile diagram and 5 photos of this 80-wagon capacity newbuilding for service between mainland Italy and Sardinia. See also *Transfer* No. 40, page 27 for two photos taken by Phil Sims in 2004.

"The Granton and Burtisland Ferry," *Engineering* [London], V34, Aug. 18, 1883, pages 156-157, text. Two page plate with 6 figures including profile, deck and engine. 45 wagons. Sept. 2, 1882, continued, pages 282-285. Long text, detail of landing.

"The Greenwich Steam Ferry," *Engineering* [London], V. 45. Feb. 17, 1888. pages 171-172. Figures, "The ferry has been so designed that should the necessity at any time arise to transport railway traffic and rolling stock from the Great Eastern Ry. On one side, to the South-Eastern on the other, it can be done by the present plant, and with this object in mind, the approaches, platforms, stages and boats have been constructed. V.46 July 20, 1888. Continuation of Feb. 17 article on Greenwich. The Feb. 17 article mentioned *Countess of Lathom* which had just been launched. On May 17, the *Countess of Zetland* was launched.; July 20, page 53 text, page 54 has profile and deck section, 4 lines of 4' 8 1/2" ga. Track, Athwartship—side loading. These two boats and the Greenwich Ferry route are not mentioned in Ransome-Wallis.

"Hafenanlage für die 'mini-club,'" *Märklin Magazin*, September 1974, pages 3-6. This article describes the construction of a port facility in 1:250 scale using the Wilhelmshaven card models of port facilities. Wilhelmshaven makes plenty of 1:250 ships with which to populate this cargo port. Includes track and wiring diagrams as well as suggestions for which card stock parts to replace with 1mm thick plywood. I did get out my *Brockhaus* and translate this in 1979, but I couldn't do it today.

"Harwich-Zeebrugge Train Ferry," *The Engineer* [London] V137, May 2, 1924 pages 476-478. incl. Photos of lift bridge.

Haveland, Hans. "Ohne Umweg nach Skandinavien—Ausbau der Vogelfluglinie," Unidentified German magazine, pages 66-70. Describes ferry service across Fehmarn Belt in Denmark.

Also describes the planned “new” terminal at Puttgarden on Fehmarn, so date would probably be the early 1960s.

Hedegaard, Jan. “Motor Ferry ‘Hvalpsund,’” *Scale Model Trains* [UK], July 1994, pages 292-293. Describes an HO model of a “very small Danish railway ferry” that operated in rail service from 1927 to 1969, then a few more years carrying highway vehicles. The model appears to be about 2' long, although no dimensions are visible in the article, with a pilothouse astride the deck amidships. It has a single track running down the center. The article also cites an earlier article in this same publication on Scandinavian train ferries in the June, September and December 1993 issues of the same magazine which I have not seen.

Holm, Axel. “The Car Ferries of the Danish Government,” *International Marine Engineering*, April 1909, pages 123-129. Wonderful example of the old technical articles they don't publish any more. Includes area map, 3 photos (albeit small and illegible on the photocopy I have), general arrangements of 3 vessels, *Christian IX*, *Kjøbenhavn* and *Prinsesse Alexandrine* (and even very very small lines and offsets of *Christian IX*). Also three tables, Table I showing specifications of 8 crossings, Tables II and III giving complete fleet list with tabular specifications. Today's editors would say “we can't run the drawings that small because people won't be able to make out anything.” Well, you can if you have some idea of what you're looking at, which is the philosophy we have practiced in *Transfer*!

Hurd, Archibald S. “Railway Trains on Ferries—The Cross Channel Passage,” *Cassier's Magazine*, May 1903, Vol. 24, pages 55-63. Discusses prospective ferry service across the English Channel using service in Denmark as an example with three photos of this.

“Is she coming or going?” *Marine Engineering Review* [UK] December 1991, pages 26-27. Describes new train/car passenger ferry, *Tycho Brahe*, operating between Helsingør in Denmark and Helsingborg in Sweden. Specifications and small outboard elevation drawing. Sophisticated movable deck system.

“Isle of Wight Steam Ferry,” *Engineering* [London], V40. 1885, Aug. 7, pages 124-127. Fig. 1. “Boat under way.” Figs. 2-3, plan of tracks and loading bridge. Figs. 5-10 further details of float bridge, side wheels, two stacks, 2 tracks. 5 or 6 wagons. No upper deck. Steering from a bridge. No mention of this service in Ransome-Wallis.

“Japanese Train Ferry Str. Shohu Maru,” *Engineering* [London] V. 118, July-Dec. 1924 pages 734-735 and plate,

“Large Motor Train Ferry Built on the Clyde for South American Railway,” *Marine Engineering and Shipping Age*, November 1926, pages 623-624. Describes *Dolores de Urquiza* built for Entre Rios Railways in Argentina (see

Transfer No. 42). Underway photo and outboard elevation.

“Large-scale Train Ferry Project in the South China Sea—a first in the year of the horse,” *Drive & Control*, February 2003, pages 19-21. Describes new ferry link between Chinese mainland and island of Hainan. These pages were included as exhibits in a study submitted in September 2004 by TransTech Marine to the North Jersey Transportation Planning Authority, Inc. for the purposes of evaluating new New York harbor rail-marine options.

Lucas, John. “Quick Path Across the Cook Strait,” *Sea Breezes*, June 1999, pages 222-223. Describes newbuilding *Aratere*. Text and one photo. No drawings.

Lucas, Serge. “Quand les trains prennent la mer...,” *Chasse-maree—Histoire et Ethnologie Maritime*, No. 93, November 1995, pages 2-13. Survey of train ferries around the world, with the first 4 pages devoted to *Nord-Pas-de-Calais*. This publication is in French.

Lundbergh, Holger. “The *M.V. Trelleborg*—Train Ferry Deluxe,” *Marine Engineering/Log*, November 1958, pages 68-69. Eight photos and artist's cutaway outboard arrangement drawing of this four-track Swedish State Railways ferry that was designed to operate on the Baltic between Trelleborg in Sweden and Sassnitz in Germany.

Middleton, William D. and Spark, Robert. “London-Paris,” *Trains*, March 1954, pages 24-30. This is a pair of tandem articles laid out side by side which describe trips on the once nightly sleeping car train to Paris that crossed the Channel on car ferries as well as on the daytime Golden Arrow that took you there but required transfer as a foot passenger to a steamer at Dover, then back to the railcar in Calais.

“Military Cross-Channel Train Ferry and Transportation Depot at Richborough,” *The Engineer* [London], V. 127 Jan-June 1919, pages 31, 36, 49, 76, 82, 102, 106, 147, 154, 169, 226, Letters, 109 125 152. Two page supplement, Jan 17., V127, Jan-June 1919 Richborough, part 1, Jan 10. Part II, Jan 17, pages 49-54 has 9 figures. Supplement to *The Engineer*, Jan 17, 1919, “The Cross Channel Train Ferry T.F. 1.” 2 pages of plans, 2 pages photos between pages 58-59.

“The Motor-Driven Train Ferry ‘Nyborg.’ Another Twin-screw Vessel for the Royal Danish State Railways,” *The Shipbuilder and Marine Engineer*, February 1932, pages 116-121. Covers this newbuilding with outboard elevation, deck plans, engineroom layout, specifications and 9 photos,

“The Nanking-Pukow Train ferry across the Yangtze,” *Engineering* [London]. V. 134, Oct. 28, 1932, page 518 *Chang Kiang*, built by Swan Hunter Wigham Richardson at Neptune Iron Works, Newcastle on Tyne.

“A new Cook Strait rail ferry with diesel-electric propulsion,”

Marine Engineering Review, October 1983, pages 47-48. Description of *Arahura*. Table of specifications, outboard elevation and arrangement of power and propulsion plant and electric motor cross connections.

“Die neuen Fähranlagen in Puttgarden am Fehmarnbelt,” *Schiff und Hafen*, August 1963, pages 759-776. This German language article describes in substantial detail the construction of the new ferry terminal at Puttgarden.

Nawa, M. (Japanese Government Railways, Tokyo), “New Railway Train Ferry in Japan,” *Engineering News-Record*, V.98, May 19, 1927, pages 148, 150. “Railways of Island connected by train ferry steamers and terminals-quay walls.” Fig. 1 Map, Train Ferries of Japan, shows 3 routes and date established. Fig. 2 Drawing of terminal at Hakodate, Fig. 3 Bridge construction, Fig. 4, Sections of Strs., Fig. 5 Quay wall construction.

“New train ferry ventures challenge fixed link concepts,” *The Naval Architect*, January 1988, page E23-E27. Describes technical details of some vessels currently being built or built in previous ten years with decent graphics including *Railship 1*, *Railship 2*, *Stena Scanrail*, *Nord-Pas-de-Calais*, *Oresund*, *Trekroner*, *Geroite na Odessa* class, an Italian double-ender, and alterations to *Stena Searider* and *Stena Seatrader*, *Sandanavia Link*, and *Svea Link*, *Nord Pas-de-Calais*, two newbuildings for A/B Swedcarrier, two for Rumanian Navrom, one for Italian State Railways Straits of Messina service. Cited in *Transfer* No. 23.

“New Vessel for the Harwich-Zeebrugge Train Ferry Service,” *Engineering*, August 3, 1951, pages 139-141. Description of *Norfolk Ferry*. Seven photos but no drawings.

“New Zealand train ferry “Aramoana,” *The Marine Engineer and Naval Architect*, August 1962, pages 819-821. Article gives detailed specifications, outboard elevation and deck plans (three tracks with single-track stern loading) and four photos.

Northern Nigeria *St. Fabius Engineering* [London]. V. 88, Oct. 11, 1909 pages 440-444. 3' 6" ga. Plans.

North Sea car ferry service resumption. *Engineering News-Record*, V. 91 Nov. 14, 1923, page 710.

Olsen, Harold M. “Danish State Railway Ferries,” *Transactions of the Institution of Engineers and Shipbuilders in Scotland, Inc.*, Vol. LII, Fifty Second Session, 1908-1909, 1909, pages 180-193. Plates showing upper and lower deck plans, inboard elevation and two section views of single-track twin-screw *Helsingborg*, same for two-track *Storebaelt*, and two-track *Prins Christian*. Nice paper.

“Paddle Engines of the Midlothian.” *Engineering* [London], V.34. Sept. 8, 1882. 2" of text followed by a two page plate. See also Sept. 22, page 286.

“Progress of Engineering in the East,” *The Engineer* [London], V. 116, July 11, 1913 No. XII, Federated Malay States Rys., Map and 2 loco photos. Pages 29-30 3 plates one of which, Fig. 4, is “The Wagon Ferry Boat.”

“Proposed Steamboat for a Channel Ferry,” *Engineering* [London], April 12, 1867, page 357, Designed by Messrs. A.& J. Inglis, Engineers, Glasgow.” Fig. 1, Profile, side wheels, single end operation but 2 tracks throughout. Fig. 2, plan, plus text.

“Rail Ferries,” *MacGregor Navire News*, March 1985, pages 3-11. This is the house organ of a company that specializes in ship technology especially elevating equipment. This issue had this special section with chapters as follows: “A German-built rail ferry—a renaissance on two fronts” (page 2), “Commercial prospects for train ferries” (page 3), “Emancipation of the rail ferry” (page 4), “Classic rail ferry for Baltic Sea” (pages 5-6, covering *Railship II*, a three deck vessel with decks connected by an elevator), “USSR involvement in train ferries” and “The Illychevsk-Varna service) pages 7-8, “Eight rail/car ferries for Soviet Caspian Sea service” (pages 8-9, “Tight operating schedule for ‘Garibaldi’” (pages 9-10) and “Harbour ramp at Baltic and Black Sea terminals (page 11). These pages were included as exhibits in a study submitted in September 2004 by TransTech Marine to the North Jersey Transportation Planning Authority, Inc. for the purposes of evaluating new New York harbor rail-marine options.

“*Railship III*--Expert system optimizes engine efficiency,” *Motorship*, June 1990, pages not shown. Speaking of *Railship II*, this article offers a description of “world’s largest train ferry,” operating between Travemünde in Germany and Hanko in Finland. Four photos and diagram of outboard elevation and decks.

“*Railship III* takes FAKS to sea,” *Marine Engineering Review* [UK], May, 1990, pages 20-22. Detailed description of this state-of-the-art train ferry, a near sister ship to 1984-built *Railship II*. Two photos, outboard elevation and rail deck plan (3 rail decks connected by elevator, reminiscent of Seatrain except this is self-contained).

“The Railway Steam Ferry on the Lake of Zurich,” *The Engineer* [London] V. 27 March 12, 1869, page 192. translated from *Neue Zürcher Zeitung*. Ramankorn to Friedrichshaven. (Bob P. thinks this is on Lake Constance, the Bodensee Rys.) Launched Oct. 1868, 2 tracks, Not in Ransome-Wallis.

“Railway Ferry Steamer for the Volga,” *The Engineer* [London], V. 80 Sept. 20, 1895, page 284. Also, Vo. 80, Sept. 27, 1895, 2" letter on knock-down shipment of steamer to Volga. Pages 317-318. Also, V. 80 Sept. 20, 1895 page 284 Volga, contd. Photo profile and view on deck from ??? stern. 2 stacks, tandem, four tracks. Shipped from Britain in four parts. Explains that Volga a swift flower river. Difference between extreme river levels of midsummer and spring is no less than 45

feet. The difficulty presented by the enormous difference in the river level has been overcome by an arrangement of hoists, activated by hydraulic cylinders. This structure is placed at the bow of the vessel and is so designed that two tracks can be lifted at once. The cradles, two in number, are flush with the deck. When in the lowest position, the trucks are hauled on to them by means of a hydraulic capstan, and can be lifted to a height of 25 ft. Over 2/3 of a page. Can carry 24 trucks.

“Railway Ferry boat for San Juan, Puerto Rico [Spanish colony at the time].” *Engineering* [London] May 16, 1884. Constructed by Messrs. Edwards and Symes, Engineers, London. Fig. 1, profile (doubled-ended screw), Fig. 2 deck (single track). Meter gauge. Fig. 3, lower deck. Iron hull, 1 60', br. 16ft. Br. Over sponsons, 25ft. Boat has hinged platforms. Hauling engines on boat.

“Railway Ferry Over the Rhine at Rheinhausen.” *Engineering* [London] V.10, Dec. 7, 1870. On Osterath-Essener Ry. Near Duisburg. Text. A chain or cable steamer. Carries 8 wagons. Fig. 1, channel profile, 2 slips, Figs. 3-18, details. Part I, pages 397-398, text. Continued in V. 11. Jan 12, 1871 with Part II. Pages 29-30, Figs. 1-15 and text. Feb. 10, 1871, Part III, pp. 109-110, Several figures and text. Also in V. 11, Jan 12, 1871. Part II of III, pages 29-30, Figs. 1-15 & text also Feb. 10, 1871, Part III of III, pages 109-110, several figures and text. (Was this the operation depicted in the museum model described in *Transfer* No. 32, page 19?)

“The Railway Ferries *Korsör* and *Nyborg*, constructed for the Danish Government by the Kockums Mekanska Werkstad Aktiebolag, Malmö, Sweden” *Engineering* [London], V. 38, Aug 8, 1884, pages 130-131. Text, 2 page plate. Fig. 1, inboard profile, Fig. 2 Passenger deck, Fig. 3, car deck, 2 tracks from single entry. Side wheels, doubled end. Each boat can carry 17 wagons or 13 passenger carriages. Also, V38, Aug. 22, 1884, Outboard engraving, sections and drawing of engines. Lengthy description, pages 176-177 and 2 page plate. *Korsör* on paddle box.

Riley, Frank. “The *Essex Ferry*,” *Meccano Magazine*, Vol. XLII, No. 6, June 1957, cover and pages 266-267 cover this ferry launched October 27, 1956 as the third of the post WWII vessels for the Harwich-Zeebrugge service.

“The Richborough Transportation Depot and Train Ferry,” *The Engineer*, Jan 10, 1919, pages 31-34 and Jan 17, 1919, photo supplement. Describes the construction, equipment and operation of the first cross-channel train ferry service between England and Belgium occasioned by war transport needs. Very descriptive and well illustrated with photos and drawings. Reproduced with additional background material by Phil Sims and John Teichmoeller in *Transfer* No. 41, pages 6-13.

Rohrer, Dr. Jansjurg. “Güterwagen--auf ‘hohen’ See,” [Freightcars on the ‘high’ sea.], *Loki*, September 1998, pages 76-83. This article from the Swiss railway enthusiast magazine,

originally cited in *Transfer* No. 24, is in German and describes, with some color photos, a marvelous tug-barge operation serving an electric steel plant located on Italian mountain lake Isèo.

“Royalty christens Sweden-Denmark bridge,” Baltimore *Sun* (Associated Press material), August 15, 1999. The 10-mile, \$2.6Billion bridge-tunnel crossing the Oresund between Copenhagen, Denmark and Malmö, Sweden was opened on August 14. This put some ferry services out of business.

Shaw, James L. “Japan’s Growing Ferry Fleet,” *Steamboat Bill* No. 149, Spring 1979, pages 26-35 and back cover. Brief text and fleet list with illustrations of some of the vessels. As with some other articles, I can’t tell if any of these are rail ferries. There are no photos of rail-transfer operations and absolutely no mention of railcar capacities in the vessel descriptions, although at the time of the article the Honshu-Hokkaido train ferry service was still operating.

“Ships of the Invasion Fleet,” *Engineering* [London] V. 163, Sept. 26, 1946. Pages 117-119, paper at joint meeting of Institute of Naval Architects and Institution of engineers & Shipbuilders, Glasgow, Photos & drawings, Figs. 8 & 9 for train service. Also, Jan 31, 1947 pages 117-119, Feb. 7, pages 141-143, Feb 14, pages 158-160

Sims, Philip. “Overseas Transportation of Railroad Equipment,” *Transfer* No.15, pages 6-9. Phil supplied various photos of “heavy lift ships” loading and unloading railway equipment for overseas shipment. The Heavy Lift Ship is an interesting genre of which I was not aware until Phil’s submissions. Phil has continued to monitor the international railway enthusiast publications for notices of shipments on modern-day heavy lift ships. These notices are cited regularly in *Transfer*’s News column, including a long series of reports of shipments of General Motors diesels from Canada to the UK.

Sims, Philip. “Overseas Transportation of Railroad Equipment or Heavy Loads, Part 2,” *Transfer* No.33, pages 5-7. This installment covers a series of photos showing trolley cars being loaded aboard a ship in New York bound for Porto Allegre, Brazil.

Sims, Philip. “Railway Ferry on the Russian Great Lake,” *Transfer* No. 29, page 16. This is an annotated and illustrated version of a paper given by Isaac Handy at the North-East Coast Institution of Engineers and Shipbuilders in Sunderland, England in 1904 discussing the construction of the Russian ferry *Baikal*. The three photos used in this *Transfer* article came from the DeRodakowski book (see above).

Sims, Philip. “Lake Titicaca Train Ferry Trip.” *Transfer* No. 30, pages 23-25. Eleven photos illustrating a trip on the dual-gauge cross-lake ferry taken by author in August of 1999.

Single track. *The Engineer* [London], V. 34, Sept. 27, 1872,

page 219. Letter to the editor about 6" x 6" from Alfred Goddard with drawings, cross section and side view of proposal for a channel ferry. Two cylindrical hulls, 500' long by 25' in diameter. Deck for single track. Side wheels.

"Slipways for the Train Ferry Service across the Benue River, Nigeria." *The Engineer* [London], V. 138, Aug. 15, 1924, Messrs. Cook, Fitzsimmons, Wilson & Mitchell, Westminster, Engineers. Page 182, 4 plans, page 183-184, page 186, "Cradles for the train ferry service across the Benue River, Nigeria. The Horseley Co., Ltd., Shropshire, and the Patent Shaft and Axletree Co., Ltd., Wednesbury, Engineers." For description see page 183. 2 plates, side view of cradle showing protecting slipper and elm blocks for keel of vessel. Cradle erected in maker's yard showing shore end adapter and method of mooring. Page 223, Aug 22, errata, Horseley should read Horsehay

"The Southampton Train Ferry." *Engineering* [London], February 7, 1919. Plate X between pages 178-179. General arrangement of Train Ferry Bridge constructed by Sir W.G. Armstrong Whitworth and Co. Figs. 17-20 were plans of the linkspan. There was something else on this same subject on page 186. This was the companion WWI service to that which operated out of Richborough and which was reprinted in *Transfer* No. 41. Additional plates on this subject apparently continued in subsequent issues, Feb. 21, 1919, between pages 244-245, plate XII, Figs. 21-38 and Plate XIII, Figs 57-66. The latter included machinery. Text was on pages 238-248 of this issue as well as Figs. 30-40.

"Swedish State Ry. Ferry *Malmo*." *Engineering* [London] Vol. 88, July 23, 1909, pages 116-118. Inboard profile, deckplans. See also page 58, p. 117, Danish State Ry., *Christian IX*.

"Tr. Ferry *Scilla*, Strait of Messina," *Engineering* [London] V137, Feb. 23, 1934. pages 216-217

Taji, Y. "The Train Ferries of the Imperial Japanese Government Railways," *The Shipbuilder and Marine Engine Builder*, February 1932, pages 108-115. Gives an excellent overview of the three services in operation at the time and technical descriptions of representative vessels. The vessels range from those resembling Great Lakes-style on the longest route between Honshu and Hokkaido, to Baltic Sea types on the shorter route between Honshu and Kyushu, and ones that resemble the Sacramento Northern's *Ramon* on the short route across the Inland Sea from Honshu to Shikoku. All of these services were decimated in WWII, restored thereafter, and subsequently replaced by bridges/tunnels, the last one being the Hokkaido link.

"Train Ferry for the English Channel, 2" *Engineering News-Record*, V. 87 Nov. 17, 1921, page 803, says Richborough-Calais service to be started again, mainly for fruit and vegetables.

"Train ferry across Lake Tanganyika, Africa," *Engineering* [London] V. 104, Sept. 7, 1917 pages 265-266. This service connects Albertville, Belgian Congo (Congo Rys.) With Kogoma, Tan.-Tanganyika Rys., both meter gauge, about 100 mi.

"Train Ferry Poses Problems," by a "Special Correspondent," *Railways of Australia Network*, December 1984-January/February 1985, pages 44-47. Describes some of the technical challenges faced by the New Zealand Railways running train ferries across the less-than-tranquil Cook Straits.

"A train ferry steamer, the *Lucia Carbo* has been built for the Entre Rios Ry. Of the Argentine Republic," *Engineering News*, V. 58, Sept. 26, 1907 page 349, 3" A 50 mile [run?] on the River Plate. Steel. 278'x56'x18' 10" 3 tracks. A&J Inglis, Glasgow. A voyage of about 4 weeks out under own power. Cf. *Transfer* No. 42, page 20.

"A train Ferry Between India and Ceylon has been authorized by the Government of India," *Engineering News*, V. 61, June 24, 1909, page 680 3"

"A train ferry steamer *Drottning Victoria* described." *Engineering News*, V. 61, V. 62 Sept. 2, 1909, page 240.

"The train ferry Steamer *Drottning Victoria*." *The Engineer* [London], V. 108 July 16, 1909 pages 55-56 Map, plans of Sassnitz and Trelleborg harbours. Also, July 30, page 107, more on above. Also Fig. 6, *Lillebelt* inboard profile and deck plan; same issue, *Drottning Victoria*. Page 108, many figures, plans of landing berth, landing bridge, and details. Train Ferry service between Sassnitz & Trelleborg. Page 109, cross section of *Drottning Victoria*. Page 112, 4 photos: The navigating deck, looking forward, spring buffers on the car deck, the car deck looking aft, the car deck looking forward. Between pages 126-127, 2 page plate, inboard profile, half promenade deck, half car deck, lower deck. Also, Aug 27, page 225, about 3" of letter comparing *DV* with Lacke Michigan Car ferries. Refers to *The Engineer*, Mar 23 and April 6, 1906.

"The Train Ferry Steamer *Exequiel Ramos Mexia*." *The Engineer* [London], V. 113, June 28, 1912, page 686, Photo, sidewheeler, single deck, A&J Inglis, 3" text. Argentine train ferry steamer, can carry 8 wagons, 2 tracks. A similar steamer *Roque Saenz Pena*, built by Inglis. The fifth train ferry built by Inglis for the River Plate

"A Transfer Steamer for Lake Baikal," *Engineering News*, V. 42 Oct. 5, 1889. Describes transport from Britain to Russia. Also, April 12, 1900 ½" text. "An Ice Breaker Steamer on Lake Baikal." Made satisfactory trial trip February. Boat not identified.

"Transport of rolling Stock to France (WWII)," *Engineering* [London], V. 160, July 27, 1945, pages 67-70 illus & figs.

Tritton, Seymour, B. "River Steamers for Indian Railways," A paper in *Transactions of the North-East Coast Institution of Engineers and Shipbuilders*, Vol. III, Eighth Session, 1891-1892, pages 209-219+ Figs. 1-4. Describes a railcar barge with a turntable in the center (powered by on-board steam engine) and three radial tracks on each end, as the river site where this operates is such that a traditional end-loading landing is not possible, and the railcars are loaded, by means not described, onto the turntable in the center.

Turner, Colin. "Baikal: The 'Monster Ship,'" *Ships in Focus Record* 5. Page numbers and date of publication not shown on photocopy I have. Describes construction and service of Lake Baikal icebreaker, 1900-1918. Orig. cited in *Transfer* No. 26.

Tuxen, Capt. I.C. "Danish Steam Railway Ferries and Ice Breaking Steamers," *Transactions of the Institute of Naval Architects*, 1897, pages 105-115. Includes tables of vessels in various services since inception in 1872 and a plate with inboard elevation, upper and lower deck plans and midship section of sidewheel, two-track ferry *Sleipner* which was the newest vessel in the service at the time of the paper.

"A twin-screw motor Train Ferry *Dolores De Urquiza*, *The Engineer* [London], V. 142, Oct. 29, 1926, page 477. Built by Inglis of Pointhouse, Glasgow for River Parana service of Entre Rios Rys. Std gauge, 4 tracks. ½ page includes picture and text; Aug. 20, p. 187, "A large motor train ferry," 6" text says a distance of 33 miles. 4 tracks to carry a total of 33 wagons of 40 ton capacity. Will also carry passengers and freight.

Van Dyck, Paul. "Hainan rail link launched," *The Motor Ship*, May 2003, page 32. Describes the first railway ferry to cross the Hainan Strait in China, the *Yue Hai Tie I Hao*.

Volga River, mention of a steamer for carrying trains across. *Engineering* [London] V.64, July 16, 1897. By W. A. Armstrong Whitworth & Co. 24 carriages. Steamed to St. Petersburg, disassembled into halves to pass through canal. Pages 69-70, mentioned in a talk on ferries and icebreaking steamers at International Congress of?????. Also:

Engineering [London], V. 64, July 23, 1897, pages 101-103. "The River Volga" (and canals). Aug 27, pages 248-249, Sept. 10, pages 309-310. Also, "Train ferry across Volga between Saratef (?) And Dvalsk (?) "Oct. 29, pages 524-525. Nov. 19, pages 612, 616, Dec. 27, pages 727-729

"'Vortigern'—for all cross Channel duties," *Marine Engineer and Naval Architect*, September 1969, pages 361-364. Description of the vessel with outboard elevation deck plans (4-track with 2-track stern rail loading) and 6 photos. This vessel replaced *Hampton Ferry*, and had a newly built French sister, *Saint Germain*.

Whiting, Paul. "Railfreight Distribution takes to the high seas—WE ARE SAILING," *Railnews*, September 1991, pages

20-21. This is a nice contemporaneous news report on the Railfreight operation between Dover and Dunkirk aboard *Nord pas de Calais* with commentary about the possible effects of the soon-to-open Channel Tunnel.

"World's largest 'Combi,'" *Marine Engineering Review* [UK], January 1989, pages 20-21. Description of *Nils Dacke*, combined rail/trailer/lorry/car/passenger ferry operating between Trelleborg, Sweden and Travemunde, West Germany. Three photos, specifications, inboard elevation and deck plans showing six tracks on the "combi" deck (rails) and tilting ramps between the three decks.

Yamamoto, Hiroshi. "One Century of Train Ferries, *Kagaku Asahi Magazine*, December 1954. Page numbers unknown; I have a photocopy of a translated typescript courtesy Norman Brouwer from the Beauregard Betancourt Collection. Article provides a global survey of train ferries with citations of some Japanese vessels. My typescript also includes photocopies of snapshots of vessels in the various Japanese operations.

OTHER UNIDENTIFIED PLANS

Over the years, friends and members have sent me photocopies of material where the source cannot now be identified. In some cases this was due to imprecise recordkeeping on their parts (of which I have certainly been guilty); in other cases, they acquired unidentified material from others that they just passed along. In the course of compiling this Bibliography, I have been able to sort out most of this material. However, the following items were given to me by my friend, the late Joseph Schmitt. Joe died in 1989—much too soon—before RMIG was founded, and I know he would have become a member had he lived. I find these too interesting not to mention. Undoubtedly, one of our readers can identify the sources:

"*Cambridge Ferry*," author unknown, probably Reginald Carpenter, who died in 1993, was a well-known and prolific 1:1200 scale custom builder of ship models, and he apparently ran a series of articles in the English ship modeling magazine, *Model Boats* (?). This piece came from the November 1966, page number not showing. Describes, with simplified drawings, the construction of a 1:1200 scale model of this English Channel train ferry. Drawings are full size for 1:100; the model scales out to 4 1/4" long.

"*M.S. Vortigern*," R. Carpenter, same periodical as above, October 1966, page 431. Also a thumbnail 1:1200 model construction piece for this 1969 British Railways cross channel ferry, with drawings of the components. Model scales to 4" long.

"*Trelleborg*. Source unknown but apparently one of the British-published newbuilding annuals. Pages 86-87 contain outboard profile and deck plan drawings with description of this Danish vessel built in 1958.

"*Sovestki Azerbaijan*." Similar or perhaps same volume as

above. Page 151 carries an inboard profile drawing and a brief description of this and 1962-built sister *Sovetski Turkmenistan*. These are diesel electric ferries, said to be the first of a series of ferries to operate in the Caspian Sea between Baku and Krasnovodsk..

MODELS

Deutschland (II). Card model of 1972-built German Railways car ferry operating on the Puttgarden (Germany)-Rodby (Denmark) run. Published by Möwe-Wilhelmshaven, Kit No. 1042. 1:250 scale, only 8% undersize for Z scale (1:220). Available from card model dealers everywhere or contact H&B Precision Card Models, 2026 Spring Branch Drive, Vienna, VA 22181-2973 for price and availability.

Deutschland (I). Publisher and scale same, this is the (II)'s predecessor on the same run (built in 1953). This is Kit No. 1008. It is out of print but may be available on the secondary market. Also, a color photocopied version of the original printed edition has become available.

"Eisenbahnfahre/Train Ferry," 1:100 card model of single track, open deck ferry similar to Danish *Fehmarn*. two-stack screw ferry. Published in five colored card sheets by Schreiber-Bogen Kartonmodellbau, kit no. 601, and currently in print. 60mm long.

"Motor Ferry 'Hvalpsund'" Subtitled,"a very small Danish railway ferry made for HO by Jan Hedegaard." *Scale Model Trains* (UK), July 1994, pages 292-293. This single track ferry resembles the Sacramento Northern's *Ramon*.

Jubilee Rail Car Ferry Boat by Model Expo. A single-track, 14 3/4" long open deck vessel with bridge on the starboard side. This is an HO-scale waterline model that appears to be based on a Swiss lake prototype. Looks like a mini-aircraft carrier. Offered by Model Expo in 2000, it was cited *Transfer* No. 31 and, I believe, still in the Model Expo catalog listing.

Chavez, Arthur. "Card Models of the early 'Kings Line' Train Ferries," *Transfer* No. 34, pages 26-27. Review of card model kits produced by Hans-Joachim Conrad with nice historical recap of the Kings Line. Also, in 2005 Conrad offers a free download of single track, diesel powered car ferry *M.S. Dan* in both 1:160 and 1:250:

<http://www.hometown.aol.conysmodellbau>

CAR FERRY MODELS IN MUSEUMS

There are probably models of train ferries in the rail or maritime museums of every European country which has used train ferries. Since RMIG has been in operation, we have had a few "sightings" from members, and I have seen a few myself on my limited overseas travels, so the following I'm sure is just the tip of the iceberg. Where members have sent me photos I have run them. However, due to lighting, display or photography policy issues (much less obnoxious than in the

US), I know it is not always possible to get photos of museum models.

Merseyside Maritime Museum, Liverpool, has several models of English channel rail ferries. In 1998, I saw a 1/4" scale model of *Hampton Ferry* and several 1:1200 unidentified models of cross channel ferries that were part of a large display in that scale, apparently Bassett-Lowke models. At least Bassett-Lowke offered a whole fleet of 1:1200 models of cross-Channel steamers including *Twickenham Ferry*

Also in 1998, I saw at the National Railway Museum in York a 1/8" scale model of *Suffolk Ferry* and a 1/4" model of *Hampton Ferry*.

The Science Museum in London published a catalog, *Merchant Steamers and Motor Ships*, listing models in their collection, and while I did not see these on display, the following two listings appeared:

No. 300. Model of Proposed Train-Ferry Steamer (1870). This was a 1/8" scale model of a proposed double-ended, four stack, side-wheel Channel ferry steamer. "The vessel was to have an awning-deck amidships, beneath which would run the railway metals with a platform on either side." Too bad there is no photo in the catalog.

No. 301. Model of *P.S. Fabius* (1909). This 1/4" scale model was of a double-ended, two track paddle wheeler built to carry trains of the Lagos Railway across the river Niger in West Africa. The steel vessel carried its own flexible aprons at each end, and each track also had bumpers at each end that retracted into the hull for loading and unloading. In addition the ship had a water ballast tank for trimming. Again, no photo, but it is one of the few references I have come across for what I feel must have been a number of rail-marine operations on the African continent.

The German Museum of Inland Waterways in Duisburg at Ruhrort (where the Ruhr flows into the Rhine) has a model of the sidewheeler and wagon elevator (in lieu of a floatbridge) that ferried cars across the Rhine between Ruhrort and Homberg. See *Transfer* No. 32, page 19.

At the Railway Museum of Bochum-Dahlhausen is what appears to be a plastic travel agent's model of *Deutschland II*. See *Transfer* No. 32, page 19.

At the DSB Jerbanemusuem (National Railway Museum) in Odense, Denmark, are "at least a dozen very exquisite models of the trainferries that connected" the Danish islands, according to former member Kelvin White, as reported on page 43 of *Transfer* No. 14.

Members have given me informal reports of train ferry models in other international museums, but nothing has ever been submitted formally for publication in *Transfer* aside from the

above—so keep your eyes open and your camera lens uncovered when you travel (if they'll let you). I'm sure the foregoing mentions are just the tip of the iceberg.

INTERNET STUFF

"Mother of all Maritime Lists," was described in *Transfer* No. 29, p. 23. This website:
www.cyberdyne.com/~jkohnen/linklists/boatlink-19.html,
is maintained by John Kohnen and is basically a master index of scores of maritime related websites.

"Train-ferry routes of the world." This was originally issued as a supplement to a publication called "Branch Line News" No. 755, 10 June 1995, apparently an English publication. The original version listed 47 routes in operation at the time as two-to-four-line descriptive listings. The version sent to me by Phil Sims had been updated to include annotations for routes discontinued through 1999 and perhaps later. This is a nice little list, despite some gaffes (e.g., the Cape Charles-Little Creek service is said to operate in a Potomac estuary.)
<http://www.rinbad.demon.co.uk/trnferry.htm>"