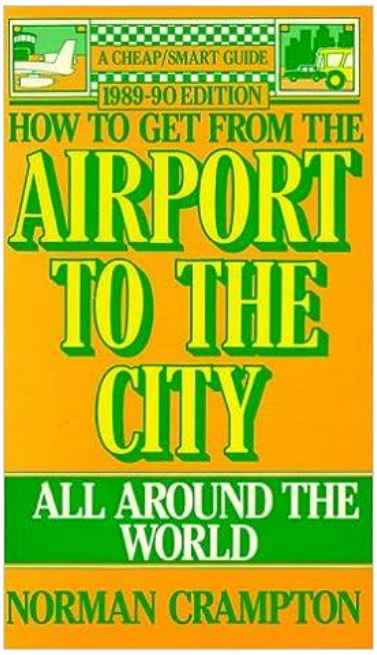
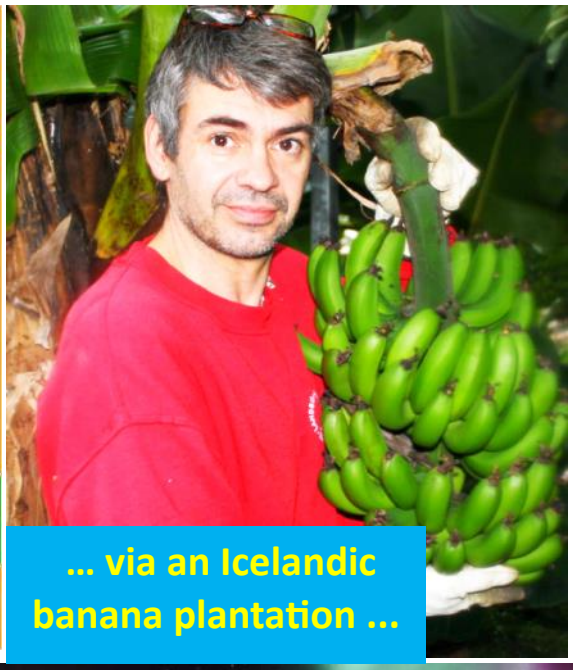
AUSTRALIAN TIMETABLE ASSOCIATION

The Times

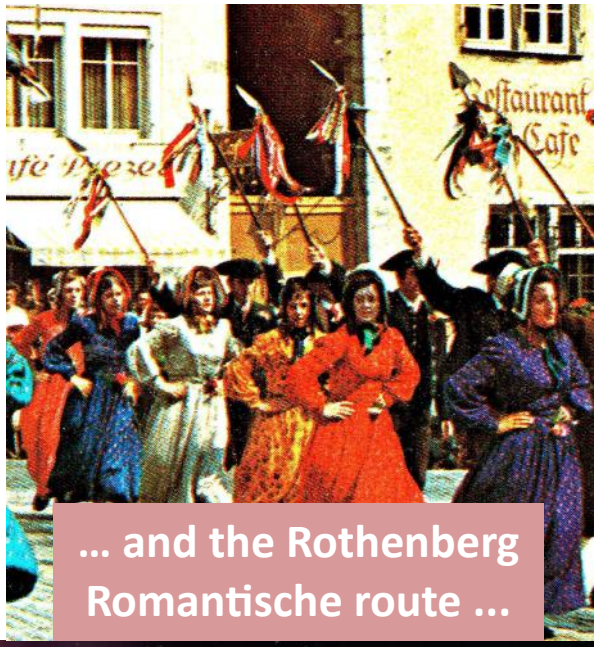
November 2023

A journal of transport timetable history and analysis





… via an Icelandic banana plantation …



… and the Rothenberg Romantische route …

… and by walking the Mid Atlantic Ridge

Inside: How to get from the Big Apple to Manly (1)
Yield analysis—in the Air and on the Rail

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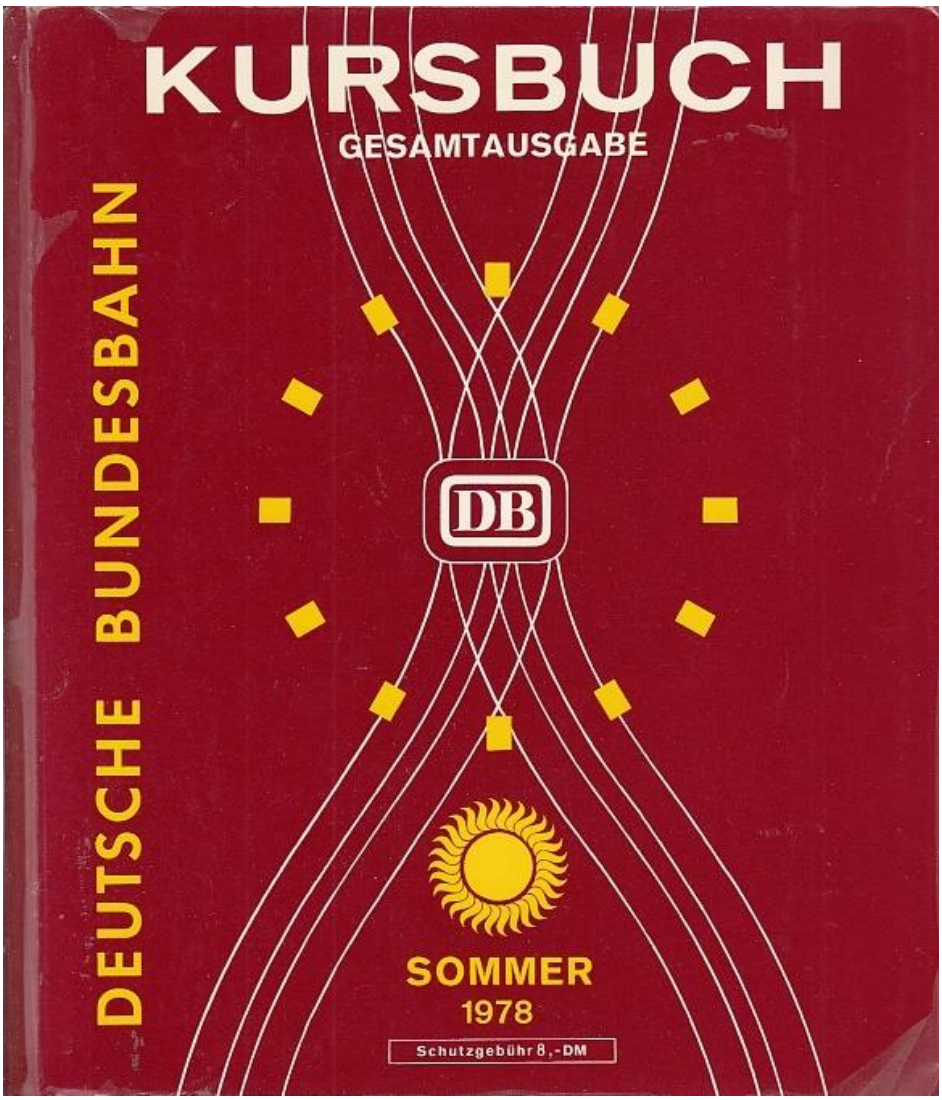
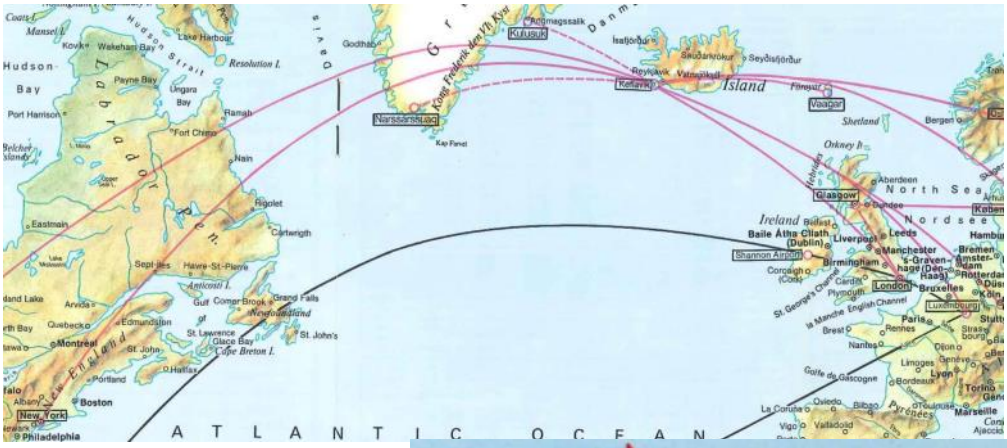


NYC-Sydney, the hard way (1) *NYC—Iceland—Luxembourg—Wurzburg.*



IT WAS SUNDAY NIGHT, 24th April 1977 in New York City and I was watching "60 Minutes". One of the items in that episode concerned the problem of youth alcoholism in Iceland. I would not normally have taken any notice of it, but it so happened that I was about to return to Australia via Iceland, Luxembourg … and many other intermediate points.

I did not know it at the time, but Bill Bryson had also used Iceland as a cheap way to get to Europe five years earlier. He said, in his later book "Neither Here nor There …

The first time I came to Europe was in 1972, skinny, shy, alone. In those days the only cheap flights were from New York to Luxembourg, with a refuelling stop en route at Keflavik Airport at Reykjavik. The aeroplanes were old and engagingly past their prime [they were DC8s in 1977] - *oxygen masks would sometimes drop unbidden from their overheated storage compartments and dangle there until a stewardess with a hammer and a mouthful of nails came along to put things right, and the door of the lavatory tended to swing open on you if you didn't hold it shut with a foot, which brought a certain dimension of challenge to anything else you planned to do in there - and they were achingly slow. It took a week and a half to reach Keflavik, a small grey airport in the middle of a flat grey nowhere, and another week and a half to bounce on*

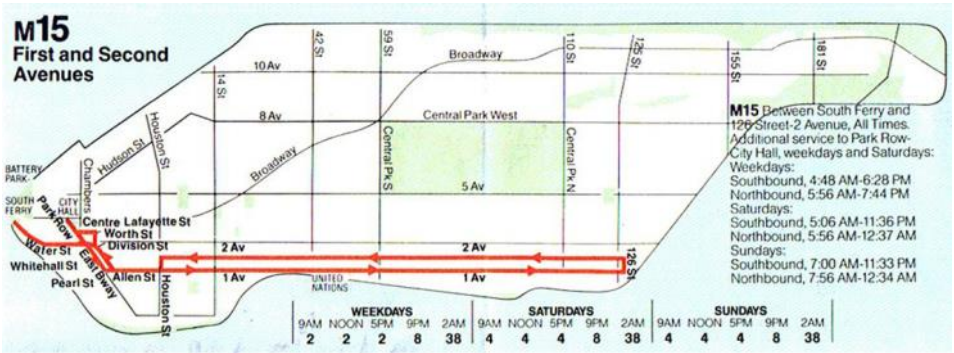
Eastbound **FROM USA TO EUROPE**

NEW YORK — ICELAND

		NOV 1 MAR 31	NOV 7 MAR 27	NOV 2 MAR 29
FLIGHT NO.		LL200 Daily	LL202 We	LL700 Fr
New York JFK Intl.	Lv	20.30	20.00	20.30
Rekyjavik Keflavik	Ar	07.00	06.30	07.00

NEW YORK — ICELAND LUXEMBOURG

		NOV 1 MAR 31	NOV 7 MAR 27
FLIGHT NO.		LL200 Daily	LL202 We
New York JFK Intl.	Lv	20.30	20.00
Reykjavik Keflavik	Ar Lv	07.00 07.45	06.30 07.15
Luxembourg Findel	Ar	12.00	11.30



through the skies to Luxembourg. Everyone on the plane was a hippie [photo bottom left, page 5]*, except the crew and two herring-factory executives in first class. It was rather like being on a Greyhound bus on the way to a folk-singers' convention. People were forever pulling out guitars and mandolins and bottles of Thunderbird wine and forging relationships with their seatmates.*

In preparation for my own flight, I went to the Barnes & Noble giant book-store near Greenwich Village and bought a copy of Norman Crampton's book "*How to get from the Airport to the City all around the world"*. For some unfathomable reason, I seem to have thrown this book away, a later cover illustration is on our front cover.

Then I made a rather arduous trip by subway to the Canal St markets and bought a gigantic shipping trunk which I transported to 51St by subway and dragged, like a draught horse with a sledge, ten blocks (1.0 km), to our apartment on 57th St, near the corner of 1st Avenue [many years later, I discovered that we had been living in a brothel]. When the International Sea&Air man came to collect the trunk on Friday, he refused to believe what I had done.

On departure afternoon, I handed in my keys, said goodbye to two of my next door neighbours Orson Welles and Uri Geller, shouldered my trusty Paddy Pallin back-pack and walked west to Second Avenue where I caught the M15 bus south to the East Side Airline Terminal. In September 1976, the M15 had been re-arranged to introduce some express running, so I caught that.

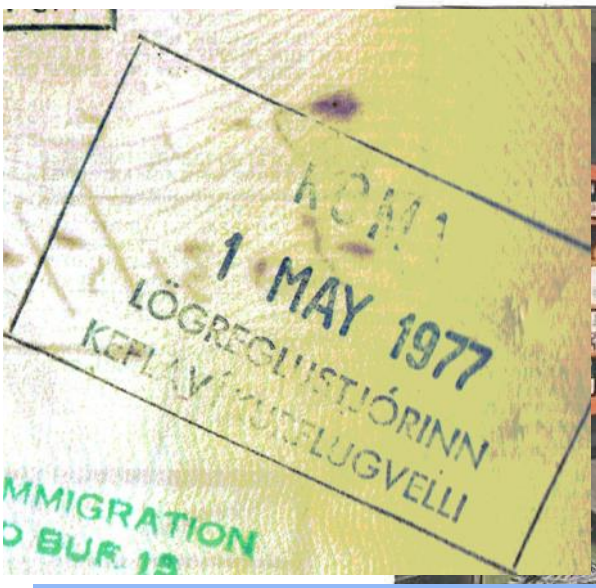
The East Side Airline Terminal was, at that time, a major starting point for buses to La Guardia and JFK airports, but was closed about a decade later. The running time to JFK was about 30 minutes. My travel was in a VW van.

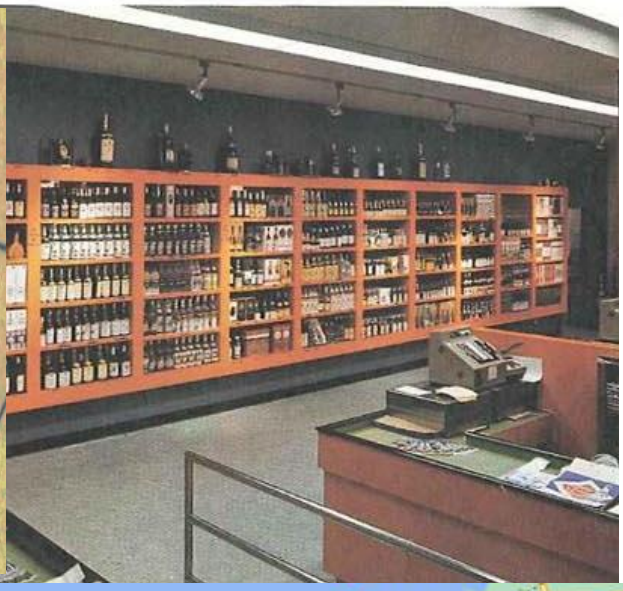
I was flying (guess what?) Icelandic Airlines, which then (and now) flew out of Terminal 7. This terminal was only seven years old at the time.

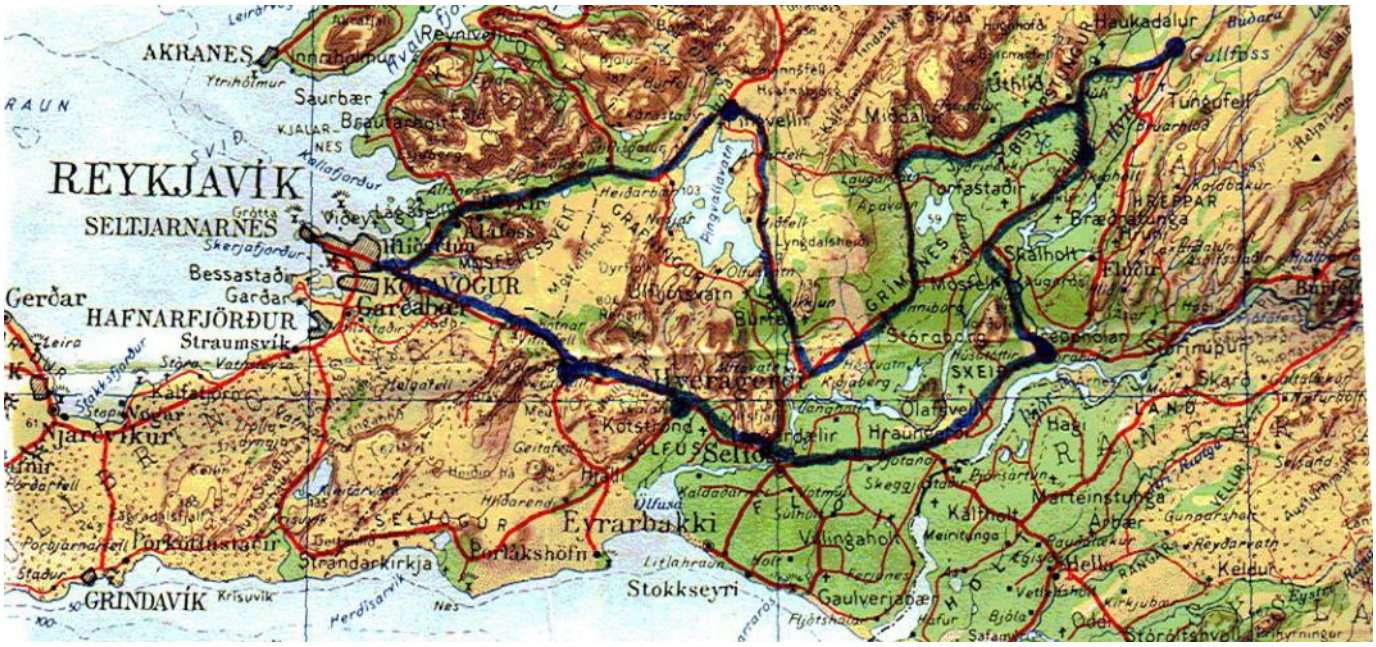
I have no recollection whatsoever of the procedures I went through at Terminal 7, nor of the flight, the first half of which was run in darkness.

My flight left at 20:00 EST [00:00 GMT], ran to time and landed at 06:30 Icelandic time [GMT 11:30]. This was already about 2.5 hours after sunrise. The sun was not to set until 22:30.

And, yes, it was full of hippies and drunks. The Big Apple was a popular place for Icelanders to let off steam. The airport at Keflavik (about 20 miles out of Rekyjavik) had the exceptional distinction in 1977 that it was the only airport in the world where one could buy Duty-Free alcohol on arrival.



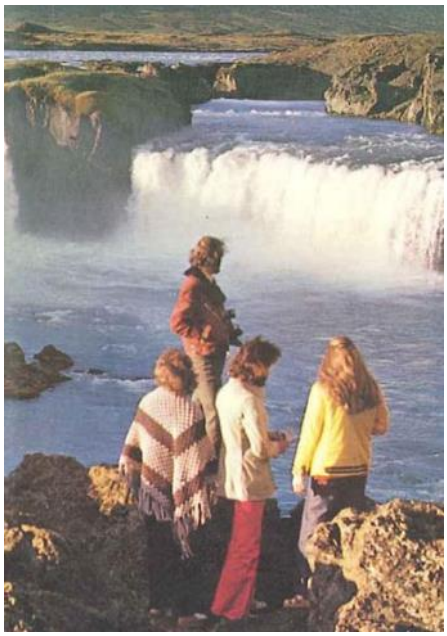




There was plenty of it and nearly every local bought oodles of it.

By the time we all boarded the bus for town the bottles were open and the contents were gurgling down myriad throats. My seat companion offered me a sample of his tipple – something that, to me looked like kerosene. It was 'Icelandic Blu'– a combination of Vodka and local blueberries which had been grown on the local banana plantations (more of bananas at a later stage).

By the time the bus dropped me off at my pre-booked hotel, my companion was all but unconscious and I had to help carry him off the bus and deposit him on the steps of the Hotel.



I was in a bit of a hurry, because I had booked myself onto the first "Cultural Tour" of the season run by Gunnar Karlsson, the Professor of Icelandic History. I guess I spent about an hour in the hotel recovering from the flight. When I scooted downstairs to the tour bus, my companion was still being treated by Ambulance Officers, with a crowd of awe-struck bystanders. You can't always believe in what you see on "60 Minutes" … but, in this case it was spot on.

It was a long tour — about 6 hours and 279km — and we visited many interesting places including

- A banana plantation, in a geothermal steam powered greenhouse. Iceland is the biggest producer and exporter of bananas in Europe.
- Althing, the site of the world's first Parliament..
- The Gullfoss, one of Iceland's biggest waterfalls [the hippies are admiring it at left].
- The Great Geysir, which became the eponym for all the others on the planet.
- We had a lunch of cod at the church in Hreppholar, reputedly the place where the last Roman Catholic Archbishop had been beheaded. At least he didn't have to eat the cod, which would have been a "fate worse than death". It made me wonder about the two sides in the Cod Wars in which Iceland had claimed a victory only months before my visit after threatening to withdraw from NATO.
- The mid-Atlantic Ridge, where one may stand with one foot on the North American Tectonic plate and the other on the Eurasian plate … more or less — the Silfra Crack These days, it's a favourite SCUBA diving spot [above right].

I did not have my most recent log-book with me … it was probably in my trunk , sailing through the Panama Canal. My recollection is that I arrived back at my hotel in broad daylight, *circa* 16:00. After a freshen-up, I went down to dinner, which I ate in broad daylight. I went to bed in broad daylight, slept the night through and

woke up in broad daylight and went down to breakfast. Breakfast was at about 5AM and the sun had been up for two hours. Iceland has no need of Summer Time, so Iceland Time is always GMT.

Soon after (05:50), it was time to jump on the Keflavic bus and we arrived there at about 06:30. Keflavik was the only airline departure point on my entire trip where I acquired an outgoing Visa rubber stamp. This might have been because I was really only a transit passenger.

At any rate, there was a bit of a problem with my carry-on baggage, when my pen-knife was detected (this hadn't happened at JFK). "*Not to worry*", said the friendly Customs Officer, "*I will put it in the hold with the checked baggage and it will be on the carousel at Luxembourg*".

The in-bound flight from NYC arrived on time, producing the usual rush on the Liquor Store but, this time, there appeared to be no evidence of stupor among the incoming passengers. We boarded the plane, which departed on time at 07:45 [07:45 GMT also] and touched down at Luxembourg City Airport at 12:00 [14:00 GMT].

Then—trouble—where was my pen knife? I waited until all but one huge cardboard box (about half a metre on a side) was all that remained, circling endlessly. After a further wait, the Customs Officer suggested that we should look inside. Sure enough, there was the penknife.

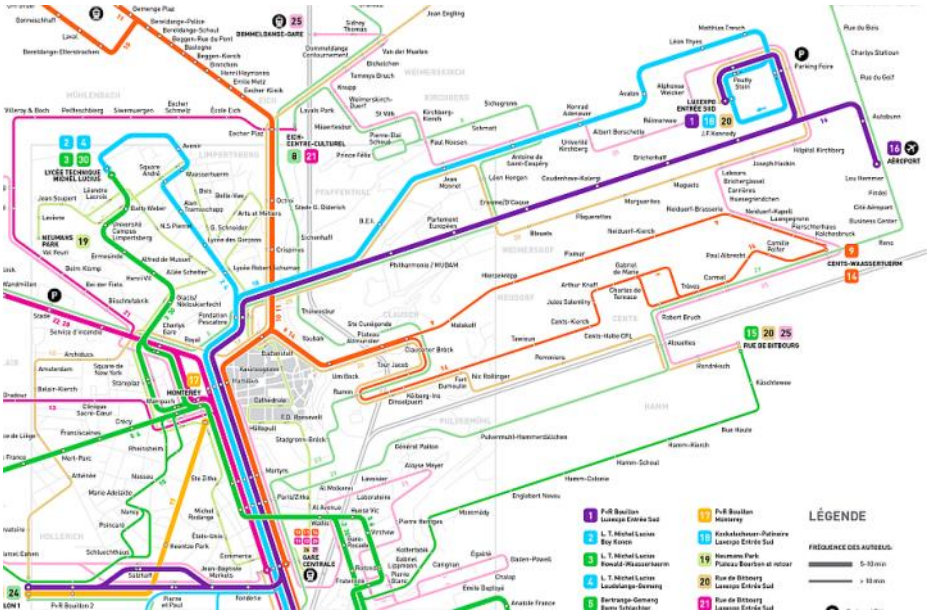
Pleased with this, and with my copy of Crampton in my hand, I and another passenger strolled down to Rue Cents and caught the Route 16/19 bus [the green route in the modern map below], along Avenue J.F.Kennedy [since renamed back to Rue Cents], to the City Railway station, where we arrived at about 15:21.

I liked Luxembourg City—and the country in general—so did Bill Bryson, the wet-behind-the ears boy from Des Moines ("Somebody had to"), who enthused:

"I had brought with me a yellow backpack so enormous that when I went through customs I half expected to be asked, "Anything to declare? Cigarettes? Alcohol? Dead horse?", and spent the day teetering beneath it through the ancient streets of Luxembourg City in a kind of vivid daze - an unfamiliar mixture of excitement and exhaustion and intense optical stimulation. Everything seemed so vivid and acutely focused and new. I felt like someone stepping out of doors for the first time. It was all so different: the language, the money, the cars, the number plates on the cars, the bread, the food, the newspapers, the parks, the people. I had never seen a zebra-crossing before, never seen a tram, never seen an unsliced loaf of bread (never even considered it an option), never seen anyone wearing a beret who expected to be taken seriously, never seen people go to a different shop for each item of dinner or provide their own shopping bags, never seen feathered pheasants and unskinned rabbits hanging in a butcher's window or a pig's head smiling on a platter, never seen a packet of Gitanes or the Michelin man. And the people - why, they were Luxembourgers. I don't know why this amazed me so, but it did. I kept thinking, That man over there, he's a Luxembourger. And so is that girl. They don't know anything about the New York Yankees, they don't know the theme tune to The Mickey Mouse Club, they are from another world. It was just wonderful."

Up to a point anyway. When it came to finding a place to stay, things went very pear-shaped for Bill:

"In the afternoon, I bumped into my acned seatmate on the Pont Adolphe, high above the gorge that cuts through the city. He was trudging back towards the centre beneath an outsized backpack of his own. I greeted him as a friend. After all, of the 300 million people in Europe he was the only one I knew - but he had none of my fevered excitement. 'Have you got a room?' he asked gloomily. 'No. "Well, I can't find one anywhere. I've been looking all over. Every place is full.' 'Really?' I said, worry stealing over me like a shadow. This was potentially serious. I had never been in a position where I had to arrange for my own bed for the night - I had assumed that I would present myself at a small hotel when it suited me and that everything would be all right after that. 'F'ing city, f'ng Luxembourg,' my friend said, with unexpected forthrightness, and trudged off. I presented myself at a series of semi-squalid hotels around the central station, but they were all full. I wandered further afield, trying other hotels along the way, but without success, and in a not very long time - for Luxembourg City is as compact as it is charming - found myself on a highway out of town. Not sure how to deal with this unfolding crisis, I decided on an impulse to hitchhike into Belgium. It was a bigger country; things might be better there. I stood for an hour and forty minutes beside the highway with my thumb out, watching with little stabs of despair as cars shot past and the sun tracked its way to the horizon. I was about to abandon this plan as ... well ... and



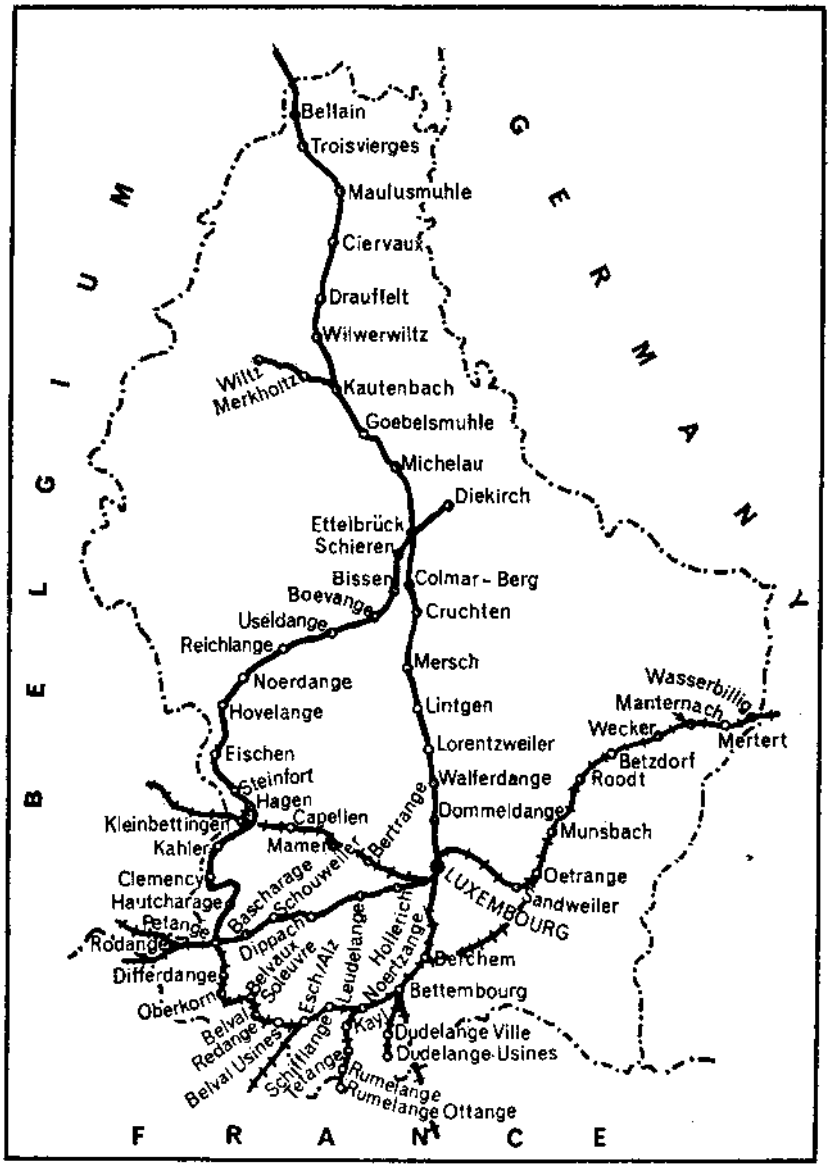
do what? I didn't know - when a battered Citroen 2CV pulled over. I lugged my rucksack over to find a young couple arguing in the front seat."

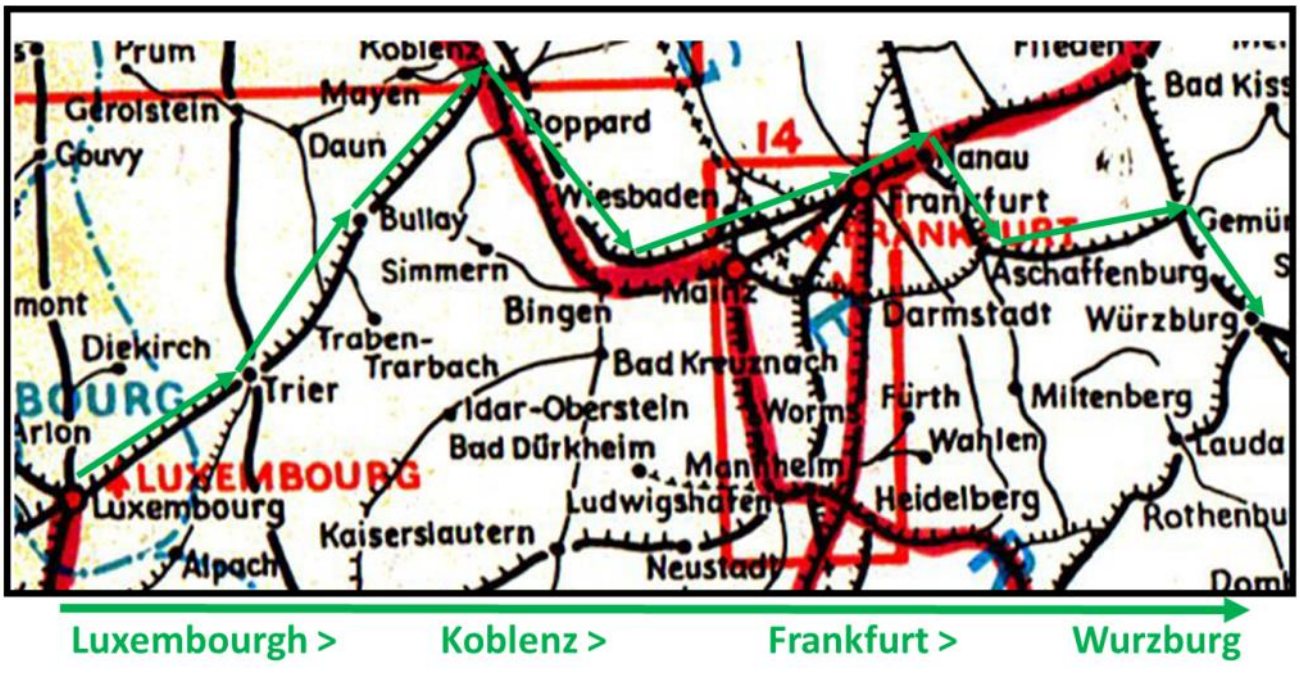
I didn't have any of these problems. I rocked up to the first hotel I came to on the Avenue de la Gare, with my cruddy clothes and cruddy back-pack, but with my Amex card in full sight and asked "*Haben sie eine Zimmer?"* No probs—in like a shot [Don't leave home without it].

Happy with this, I decided to climb up to the Citadell de'esprit and watch the passing parade of trains coming and going on the Viaduct, including a DB train bound for Aachen. This was reasonably rewarding for a railfan, but my photo catalogue from the trip asserts that I also saw people playing horseshoes.

The city has reintroduced trams including to and from the airport. Public Transport is now free.

Luxembourg's railways in the mid





1970s

The map at right is taken from Jane's World Railways 18th Edition of 1976, the last edition to actually publish system maps and the start of a long downhill slide for the publication [I have 10 of them].

Jane's was published every two years and was usually three to four years behind in the statistics which it published. I have relied, therefore, on the 1978 edition for the statistics that I think, are more representative of the conditions:

Route km:	271
Route km electrified	138
Locomotives (Diesel)	177
(Electric)	19
Railcars	36
Loco-hauled cars	77
Freight Cars	3419
Pass. traffic (thousands)	13391
Average journey (km)	19.9
Average speed (freight)	60 km/h
Average speed (pass)	80 km/h

As in Germany, Luxembourg numbers its lines, there being about 20 of them.

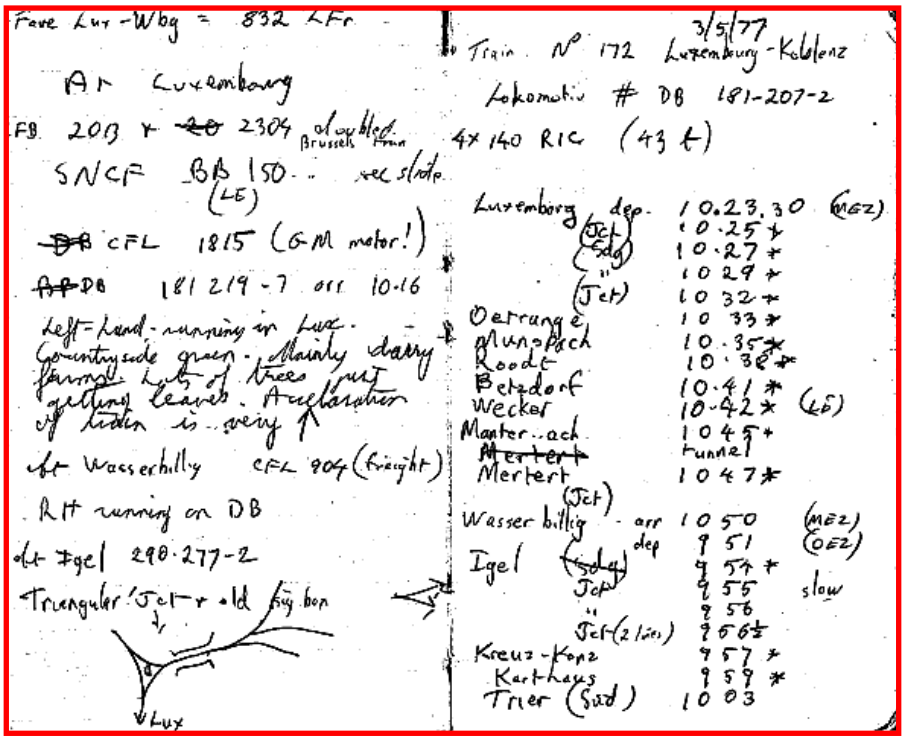
3 May 1977

After breakfast at my lodgings the next morning I spent an hour or two at the railway station, and bought a log-book for F4.20. I used it to record sightings of trains owned by CFB (Belgium), SNCF (France), DB (Germany) and CFL (Luxembourg). There can't be many stations on the planet where trains from four nations congregate. But then, there are not many land-locked countries in the world where trains from 4 countries come and go.

I have no clear recollection of how I paid for my trip to Wurzburg (most probably with cash, perhaps with Amex or BankAmericard) but I did record in the log-book that the total was 832 LFR. On 5th May 1977, that was the equivalent of $21.05 AUD [Yes! There is a website that does this for you!]. In 2023 dollars this would cost me $74.23 AUD. Fares have risen in real terms—today the trip would cost a minimum of $188.78 AUD.

My train was the *Milano Express* and arrived from Brussels at 10:16, hauled by CFB locos 2013 and 2034.

The train arrived from the west and entered the station from the south.



Three triangular junctions surround Luxembourg, giving many options for switching directions … or avoiding the Centrale station altogether; that is what the freight trains do.

In later versions of Cooks European Timetable, there seems to be no such a train. I was to take the Milano Express only as far as Koblenz.

CFL train #172 got away from Luxembourg at 10:23:30, hauled by DB loco 181-207-2.

Like Bill Bryson, I was impressed by the mixed dairying/forested countryside. As you can see from the logbook above, train running in Luxembourg is left-hand. The trip was downhill all the way to the border at Wasserbillig (I think this name means "Cheap water"). This made for lively running. This was CFL Line 30. The downgrade all the way has since played tricks with my visual memory and fooled me into believing the journey direction was southeasterly when, of course, it was northeasterly.

I don't remember much of this part of the trip, although I did note that bird-watching seemed to be well catered-for in the forested areas.

At Mertert, we reached the Mosel Valley and junctioned with the line coming in from Mertert's river port yards. At the next station, Wasserbillig, we left Luxembourg (which was running on Summer Time) and entered West Germany (which didn't adopt summer time until 1980), setting our watches backwards 1 hour. In Germany, trains travel with right hand running, but I have not recorded how we did this. Open Rail Map shows that there are currently (2023) cross-overs just west of the Sure River bridge, the mid-point of which is the actual border. At this spot, the train was running on the north bank of the Moselle, but crossed to the south bank at Igel…. continued on page 10.

Notes on German railways

For the Germans — as perhaps may be expected — everything has always had to be "*just so*":

- Every Station [there are some 14,000 of them in modern Germany] has an alphabetical code.
- Every **line** (the definition of a "line" is rather vague) has a number. There are about 9,700 of them and they add up to about 50,000 km. Railfans have tabled these in a "Streckenverzeichnis",

Date	Country	Start	End	Line number&name	WIKI name	Line Length	Trip Length
3-May-77	Germany	Wasserbillig	Ehrang Mitte	3140 Ehrang - Igel	Trier West Rly	18.64	18.64
3-May-77	Germany	Ehrang Mitte	Koblenz	3010 Koblenz - Perl (DB-Grenze)	Koblenz-Trier Rly	159.51	102.4
3-May-77	Germany	Koblenz	Bingen (Bingerbruck)	2630 Köln - Bingen	West Rhine Rly	154.41	62.6
3-May-77	Germany	Bingen	Mainz-Monbach	3510 Bingen Hbf - Mainz		30.59	30.59
3-May-77	Germany	Mainz-Monbach	Wiesbaden Ost	3525 MZ-Mombach - MZ-Bischofsheim		16.84	16.84
3-May-77	Germany	Wiesbaden Ost	Wiesbaden Hbf	3508 Kaiserbrücke - WI Ost		1.04	1.04
3-May-77	Germany	Wiesbaden Hbf	Frankfurt Hbf	3603 Frankfurt - Wiesbaden		41.25	41.25
3-May-77	Germany	Frankfurt Hbf	Hanau	3600 Frankfurt (M) Hbf - Göttingen	Frankfurt–Göttingen Rly	247.70	22.974
3-May-77	Germany	Hanau	Aschaffenburg	3660 Frankfurt Süd - Aschaffenburg		43.20	43.20
3-May-77	Germany	Aschaffenburg	Wurzburg	5200 Würzburg - Aschaffenburg		89.30	89.30
						802.48	428.82

which translates as "Route Directory", rather than "Line Directory".

But then, every Table in the Kursbuch has a "Route number" aka "Kursbuch -strecken" or KBS. A route number may involve more than one line number—and vice versa.

These three systems were set up in the early 1950s or early 1970s. The number of route numbers has greatly increased over the years:

- 1950: 341
- 1970: 490
- 1992: 892

The 1992 "Route Numbers" derive from re-unification.

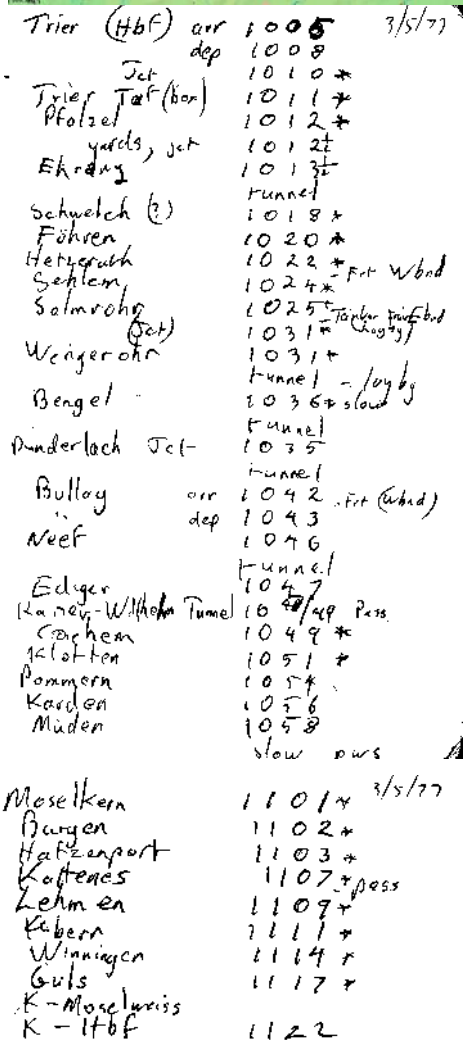
Naturally there was no easy way for anybody to access these sorts of data tables before the Internet. But there is now — Openrailwaymap [ORM].

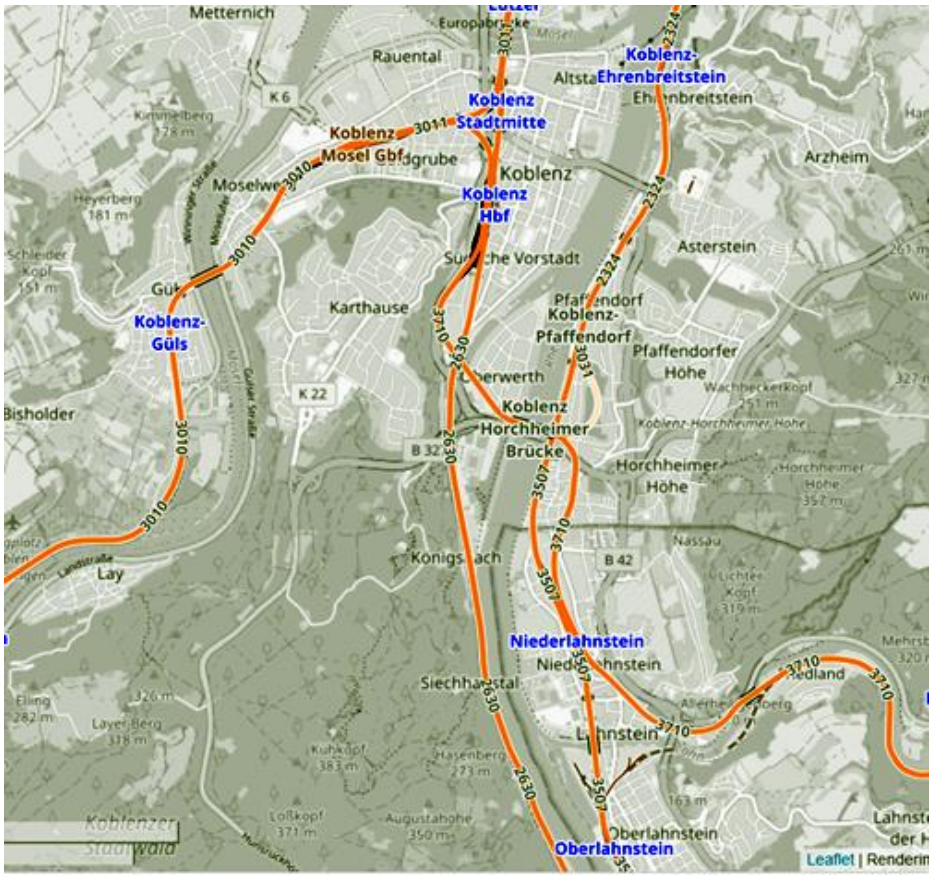
Openrailwaymap [for Germany, at least] shows both of the above codes and much more besides, including:

- Infrastructure;
- Number of tracks
- Track types [5 of]
- Track usage [21 different]
- Operating sites [7 different]
- Max speed [in 10 km/h tranches]
- Signalling
- Electrification
- Track Gauge [31 gauges!]
- Signals [28 types]
- Train Protection (safeworking) [13 types]

There is a sample at bottom left .

ORM data enabled me to calculate my travels on this and the next few days. For the "Wurzburg day", I travelled for 428.8 km over all or part of 10 different DB lines —





see Table above.

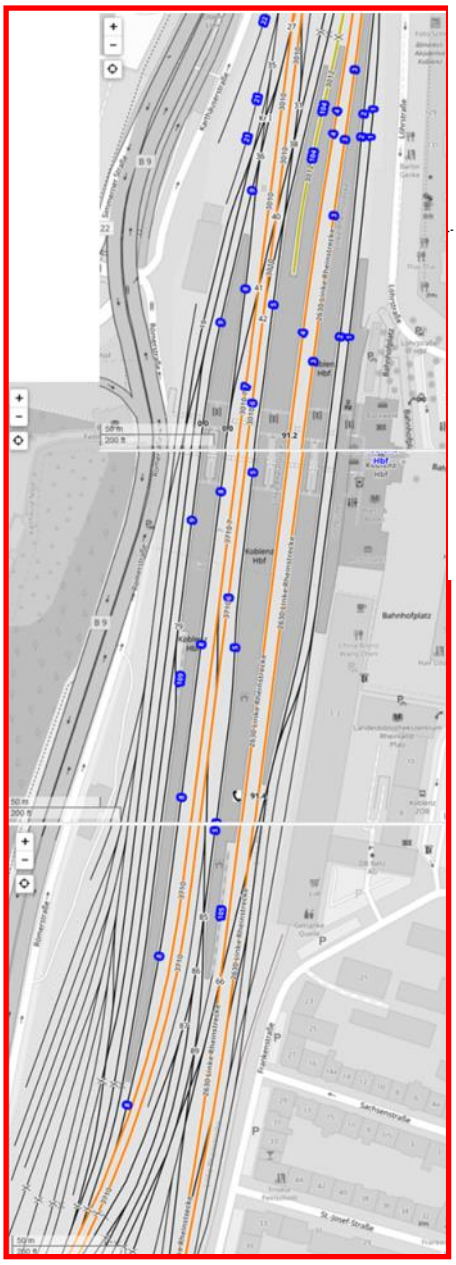
Having crossed the Moselle at Igel, we then proceeded by the Trier West railway, line #3140, Trier Hbf, where we paused for 3 minutes. We got away from Trier at 10:08, crossed the river again and proceeded down the valley towards Koblenz on line 3010, the Koblenz-Trier Railway at an easy gallop.

This line is part of what used to be called the Kanonenbahn (literally "Cannons Railway"), a German military strategic railway between Berlin and Metz via Güsten, Wetzlar, Koblenz and Trier. The notion of the generals was that they wanted a railway that stayed away from the French border.

There is a 66 metre drop in the river between Trier and Koblenz, according to Google Earth. This requires 5 locks to make the river navigable for large ships. The lower Moselle follows a mazy course among the fields and between the hills. With their many terraced and ancient vineyards … 200 of them at last count.

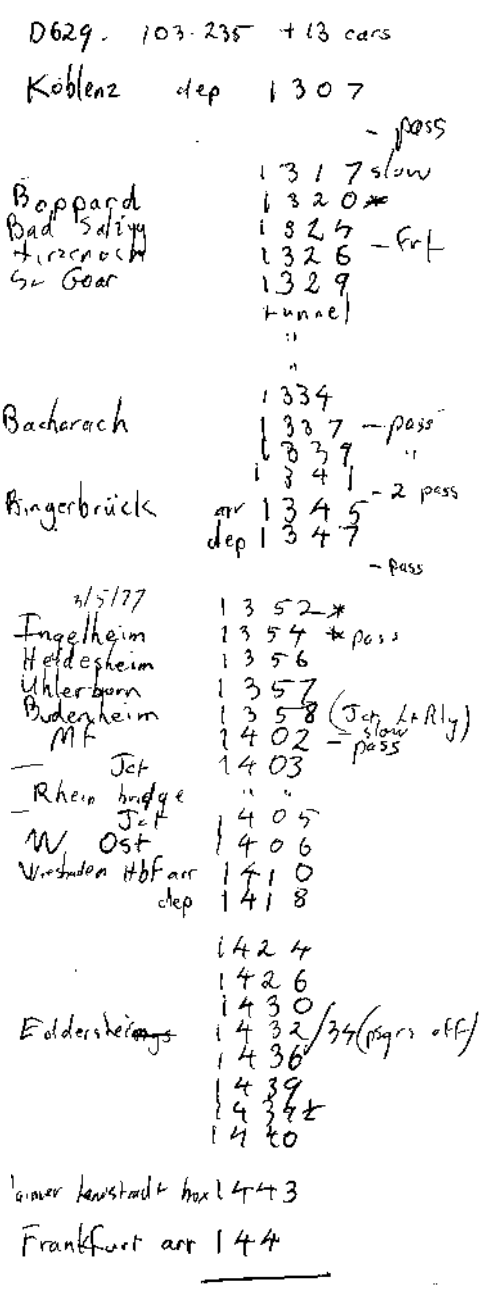
For the first 54 km, the railway does not follow these twists and turns. There was once a railway that did so (The Moselle Railway), which was mostly abandoned by 1960, although a 10.1km section between Bullay and the tourist town of Traben-Trarbach persisted and now receives an hourly service (Line 3112). Despite the lack of twists and turns, there were still 5 tunnels to help penetrate the hills between Trier and Bullay.

Just north of Bullay, we passed through the Kaiser Wilhelm Tunnel, built to bypass a meandering section of the Moselle known as the Cochemer Krampen. The 4,205 metre



The Koblenz Station yards in 2023

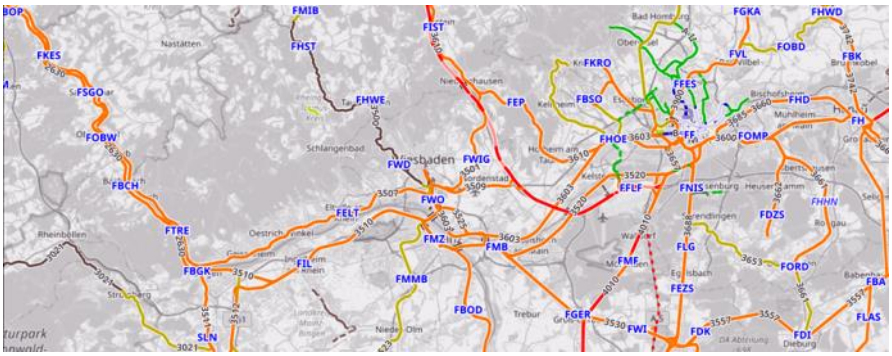
long tunnel was the longest railway tunnel in Germany from 1877 until the opening of the Landrücken Tunnel in 1985. At Winningen, we passed under the 136 metre tall Mosel Viaduct … the tallest Motorway viaduct in the

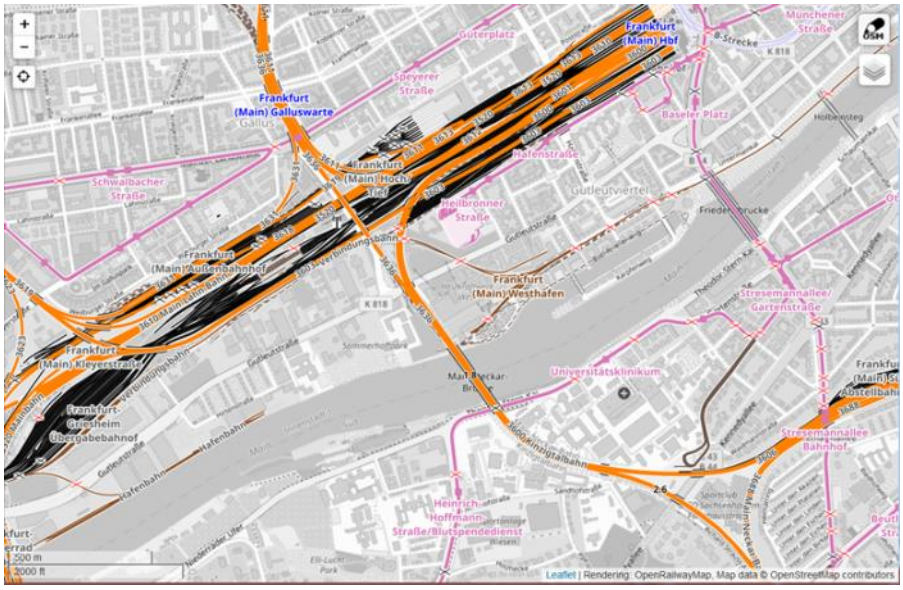


world, when built in 1972.

Koblenz, which we reached at 11:22, was the point where I had to change trains. I had nearly three hours to while away the time here before my train for Frankfurt was to leave. I spent this time photographing the railway facilities (far left) and an old castle and forts from higher up the hills, which rise to over 400 metres not far south (near left).

It was 13:07, when my train (D629?) to Frankfurt got away over a mesh of lines (#s 2630, 3510, 3525, 3508, 3603 and 3600—Open Railway Map images on page 11). It was a 13-car train of compartment carriages hauled by DB





loco 103.235.

I recall little of this journey apart from the memory of my elderly companions in the compartment reeling off the names of stations we passed through. This was helpful to me—it was not always possible to read off the names on the station boards as we flashed through.

There were three tunnels to be negotiated between St Goar and Urbar (Sud), a distance of 3 km. These were mostly at tricky river bends where it was preferable to tunnel, rather than "go round the bend".

I recorded in my notebook that there was a "Light Railway" at Budenheim. This, I think, was a light railway serving a chemical works. The works seems to be a "Logistics Centre" and seems to have at least the remnants of the "Light Railway". ORM has no information on the gauge of this line.

On this leg of the trip my train stuck close to the west/south bank of the river until we reached the Mainz-Wiesbaden area, where we crossed to the other side on the Emperor Bridge, from line 3510, to line 3525, to line 3529, to line 3603, to line 3505 and reached the bumping post at Wiesbaden's Main Station at 14:10.

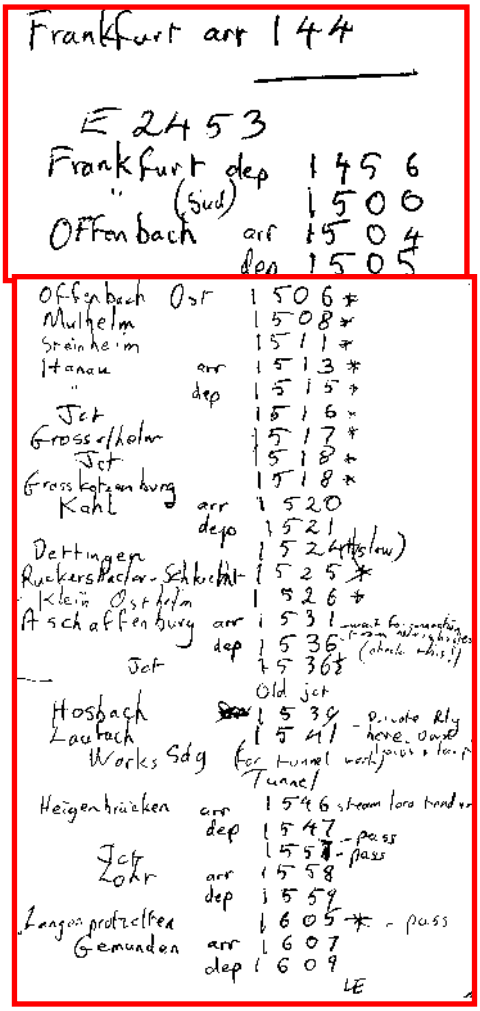
I didn't record the logistics of what happened there, but it had to involve either the loco running around our train, or a new loco being dropped on to our rear. Whichever it was, we were away again at 14:18 and travelled via line 3505, to meet up again with line 3603, which we followed to Frankfurt. am Main. This involved one stop, at Eddersheim, from 1432 to 1434, to detrain some passengers. We arrived at Frankfurt at 14:44, after passing the main signal box at 14:43.

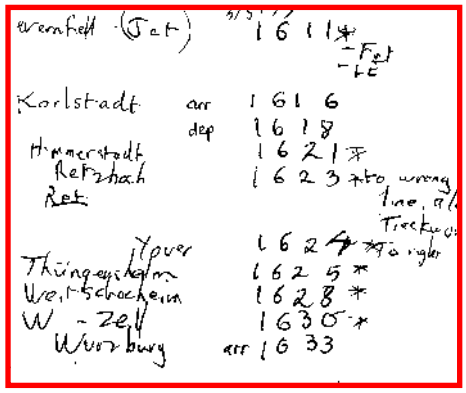
Wikipedia says this of Frankfurt Station: "*Frankfurt (Main) Hauptbahnhof, also called Frankfurt Central Station and Frankfurt Main Station, is the busiest railway station in the German state of Hesse, because of its location near the middle of Germany and usage as a transport hub for long and short distance travelling, Deutsche Bahn refers to it as the most important station in Germany. Frankfurt is the third-busiest railway station outside Japan and the second-busiest in Germany after Hamburg Hauptbahnhof. The station's terminal layout has posed some unique problems ever since the late 20th century, since all trains have to change directions and reverse out of the station to continue on to their destination. This causes long turn-*

around times."

Mine was not a through train, so I did not face this problem. And I was able to wander around this station for the 12 minutes before my Wurzburg train departed from the adjacent platform for line 3600. This is the 247 km Frankfurt-Gottingen Rly., but we were to follow it for 23 km, as far as Hanau. Both Frankfurt and Wurzburg are on the westward-flowing Main River, but the railway connecting them tends to take a less-wandering course (132 km) than does the river (203 km), which is especially tortuous near Wertheim.

Hauled by E2453, we headed south at





14:56 and quickly turned eastwards towards Offenbach [I had a dog of that name] and arrived at Hanau at 1513. This station nestles at the centre of a spiders web of lines (3600, 3680, 3685, 3660, 3670, 3672, 3742 and 4113). 3670 is an ICE line with a train every 2 hours. Hanau also has a small, but well-regarded railway museum.

Here, we turned south to towards Aschaffenberg, crossing the Hessen-Bavaria border near Grosskotsenberg. At Aschaffenberg, we had to pause for five minutes to make a connection with a train from Wiesbaden.

I remember that our loco tended to proceed rather noisily, with staccato bursts of what seemed to be some internal switching system.

Arrival at Wurzburg was dead to time … a bit of a change from our trip in January, when our host, Klaus Buff, expressed exasperation because our train was one minute late. It had been an interesting day.

Next month—*Onward to Munster.*

Comment on this article – Letter to the Editor

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Yield analysis—in the Air and on the Rail

MALCOLM KNOX AND WIKI *analyse what Alan Joyce and Hunter Harrison have in common.*

WAITING FOR A SYDNEY BUS that will never come? I'm blaming Alan Joyce.

While waiting for another Sydney bus that was late, cancelled, too full to stop, suddenly non-existent, or all four, I was wondering how I could blame the transport minister or her questionable new secretary. Instead, I landed on Alan Joyce.

This was not just the free-floating frustration of an idling mind. Before he was lord of the mile-high underworld, Joyce was a genius-grade mathematician who put his brain to work on what airlines call yield management.

This is the dark art of figuring out how to get the maximum revenue per seat out of the minimum number of services, moving around the parts of differential pricing, aircraft sizes, costs and service frequency until they all come together in one beautiful profit-making symphony.

His brilliance was first recognised at Ireland's national airline Aer Lingus before elevating him to the top of Jetstar and then Qantas, where his efficiency in the calculus of turning X seats into Y profits made him the shareholders' darling. These methods were copied throughout the transport world, eventually trickling down to private bus operators also figuring out how to match the least number of services to the highest level of profit before commuters rise in open revolt. These operators won long-term contracts from the NSW Coalition government. And here we are, still waiting for our bus to come.

Consultants provide cover for unpopular decisions, such as sacking workers. "*Sorry, I'd have kept you on, but we had an independent expert's report that said we can't afford you, so have a good life, and I'll take that keycard please."*

Consultants provide the arm's length distance from ridiculous salaries paid to CEOs. A handsomely paid independent report benchmarks our company against other companies' ridiculous CEO salaries, so there's literally nothing we can do about it; it's what we need to outlay for a quality person.

Consultants are especially useful for government departments that have chopped their headcount and now have nobody left to do the lost jobs. Like a wounded wildebeest laying out the welcome mat for the hyenas, the department first pays a consultant for suggesting these jobs be outsourced, and then hires another consultant to do the work that they once did back when they were an employee, now a bargain at twice the price.

Malcolm Knox SMH September 2, 2023 — Malcolm Knox is a journalist, author and regular columnist.

Yield Management

Yield management is a variable pricing strategy, based on understanding, anticipating and influencing consumer behaviour in order to maximize revenue or profits from a fixed, time-limited resource (such as airline seats, hotel room reservations or advertising inventory). As a specific, inventory-focused branch of revenue management, yield management involves strategic control of inventory to sell the right product to the right customer at the right time for the right price. This process can result in price discrimination, in which customers consuming identical goods or services are charged different prices. Yield management is a large revenue generator for several major industries; Robert Crandall, former Chairman and CEO of American Airlines, gave yield management its name and has called it "the single most important technical development in transportation management since we entered deregulation."

Shareholders' darling. Alan Joyce in his Jetstar days.

Definition

Yield management has become part of mainstream business theory and practice over the last fifteen to twenty years. Whether an emerging discipline or a new management science (it has been called both), yield management is a set of yield maximization strategies and tactics to improve the profitability of certain businesses. It is complex because it involves several aspects of management control, including rate management, revenue streams management, and distribution channel management. Yield management is multidisciplinary because it blends elements of marketing, operations, and financial management into a highly successful new approach. Yield management strategists must frequently work with one or more other departments when designing and implementing yield management strategies.

History

Deregulation is generally regarded as the catalyst for yield management in the airline industry, but this tends to overlook the role of global distribution systems (GDSs). It is arguable that the fixed pricing paradigm occurs as a result of decentralized consumption. With mass production, pricing became a centralized management activity and customer contact staff focused on customer service exclusively. Electronic commerce, of which the GDSs were the first wave, created an environment where large volumes of sales could be managed without large numbers of customer service staff. They also gave management staff direct access to price at time of consumption and rich data capture for future decision-making.

On January 17, 1985, American Airlines launched Ultimate Super Saver fares in an effort to compete with low cost carrier People Express Airlines. Donald Burr, the CEO of People Express, is quoted as saying "We were a vibrant, profitable company from 1981 to 1985, and then we tipped right over into losing $50 million a month... We had been profitable from the day we started until American came at us with “Ultimate Super Savers." in the book Revenue Management by Robert G. Cross, Chairman and CEO of Revenue Analytics. The yield management systems developed at American Airlines were recognized by the Edelman Prize committee of INFORMS for contributing $1.4 billion in a three-year period at the airline.

Yield management spread to other travel and transportation companies in the early 1990s. Notable was implementation of yield management at National Car Rental. In 1993, General Motors was forced to take a $744 million charge against earnings related to its ownership of National Car Rental. In response, National's program expanded the definition of yield management to include capacity management, pricing and reservations control. As a result of this program, General Motors was able to sell National Car Rental for an estimated $1.2 billion. Yield management gave way to the more general practice of revenue management. Whereas revenue management involves predicting consumer behaviour by segmenting markets, forecasting demand, and optimizing prices for several different types of products, yield management refers specifically to maximizing revenue through inventory control. Some notable revenue management implementations include the NBC which credits its system with $200 million in improved ad sales from 1996 to 2000, the target pricing initiative at UPS, and revenue management at Texas Children's Hospital. Since 2000, much of the dynamic pricing, promotions management and dynamic packaging that underlie e-commerce sites leverage revenue management techniques. In 2002 GMAC launched an early implementation of web based revenue management in the financial services industry.

There have also been high-profile failures and faux pas. Amazon.com was criticized for irrational price changes that resulted from a revenue management software bug. The Coca-Cola Company's plans for a dynamic pricing vending machine were put on hold as a result of negative consumer reactions. Revenue management is also blamed for much of the financial difficulty currently experienced by legacy carriers. The reliance of the major carriers on high fares in captive markets arguably created the conditions for low-cost carriers to thrive.

Use by industry

There are three essential conditions for yield management to be applicable:

- That there is a fixed amount of

resources available for sale.

- That the resources sold are perishable (there is a time limit to selling the resources, after which they cease to be of value).
- That different customers are willing to pay a different price for using the same amount of resources.

If the resources available are not fixed or not perishable, the problem is limited to logistics, i.e. inventory or production management. If all customers would pay the same price for using the same amount of resources, the challenge would perhaps be limited to selling as quickly as possible, e.g. if there are costs for holding inventory.

Yield management is of especially high relevance in cases where the constant costs are relatively high compared to the variable costs. The less variable cost there is, the more the additional revenue earned will contribute to the overall profit. This is because it focuses on maximizing expected marginal revenue for a given operation and planning horizon. It optimizes resource utilization by ensuring inventory availability to customers with the highest expected net revenue contribution and extracting the greatest level of 'willingness to pay' from the entire customer base. Yield management practitioners typically claim 3% to 7% incremental revenue gains. In many industries this can equate to over 100% increase in profits.

Yield management has significantly altered the travel and hospitality industry since its inception in the mid-1980s. It requires analysts with detailed market knowledge and advanced computing systems who implement sophisticated mathematical techniques to analyse market behaviour and capture revenue opportunities. It has evolved from the system airlines invented as a response to deregulation and quickly spread to hotels, car rental firms, cruise lines, media, telecommunications and energy to name a few. Its effectiveness in generating incremental revenues from an existing operation and customer base has made it particularly attractive to business leaders that prefer to generate return from revenue growth and enhanced capability rather than downsizing and cost cutting.

Airlines

In the passenger airline case, capacity is regarded as fixed because changing what aircraft flies a certain service based on the demand is the exception rather than the rule. When the aircraft departs, the unsold seats cannot generate any revenue and thus can be said to have perished, or have spoiled. Airlines use specialized software to monitor how seats are reserved and react accordingly. There are various inventory controls such as a nested inventory system. For example, airlines can offer discounts on low-demand flights, where the flight will likely not sell out. When there is excess demand, the seats can be sold at a higher price.

Another way of capturing varying willingness to pay is market segmentation. A firm may repackage its basic inventory into different products to this end. In the passenger airline case this means implementing purchase restrictions, length of stay requirements and requiring fees for changing or cancelling tickets.

The airline needs to keep a specific number of seats in reserve to cater to the probable demand for high-fare seats. This process can be managed by inventory controls or by managing the fare rules such as the AP (Advanced Purchase) restrictions. (30 day advance purchase, 21 day advance purchase, 14 day advance purchase, 7 day advance purchase, day of departure/walk up fares). The price of each seat varies directly with the number of seats reserved, that is, the fewer seats that are reserved for a particular category, the lower the price of each seat. This will continue until the price of seat in the premium class equals that of those in the concession class. Depending on this, a floor price (lower price) for the next seat to be sold is set.

Intercity buses

Yield management has moved into the bus industry with companies such as Megabus (United Kingdom), Megabus (North America), BoltBus [now out of business] and easyBus, which run low-cost networks in the United Kingdom and parts of the United States, and more recently, nakedbus.com and Intercape, which have networks in New Zealand and South Africa. Now operating and developed in Chile by SARCAN, a Chilean company that provides revenue and yield management systems focused on this industry, with the company Turbus as principal customer. Finnish low-cost inter-city bus service OnniBus, as well as Polish PolskiBus, bases its revenue flow on yield management.

Railways

While railways traditionally sold fully flexible tickets that were valid on all trains on a given day or even trains on several days, deregulation and (partial) privatization introduced yield management in the United Kingdom as well as for high speed services in Germany or France. Tickets for the same route can be as cheap as €19 but also go into the triple digits depending on departure time, demand, and the time the ticket is booked.

Yield management systems

Firms that engage in yield management usually use computer yield management systems to do so. The Internet has greatly facilitated this process.

Enterprises that use yield management periodically review transactions for goods or services already supplied and for goods or services to be supplied in the future. They may also review information (including statistics) about events (known future events such as holidays, or unexpected past events such as terrorist attacks), competitive information (including prices), seasonal patterns, and other pertinent factors that affect sales. The models attempt to forecast total demand for all products/services they provide, by market segment and price point. Since total demand normally exceeds what the particular firm can produce in that period, the models attempt to optimize the firm's outputs to maximize revenue.

The optimization attempts to answer the question: "Given our operating constraints, what is the best mix of products and/or services for us to produce and sell in the period, and at

what prices, to generate the highest expected revenue?"

Optimization can help the firm adjust prices and to allocate capacity among market segments to maximize expected revenues. This can be done at different levels of detail:

- by goods (such as a seat on a flight or a seat at an opera production)
- by group of goods (such as the entire opera house or all the seats on a flight)
- by market (such as sales from Seattle and Minneapolis for a flight going Seattle-Minneapolis-Boston)
- overall (on all the routes an airline flies, or all the seats during an opera production season)

Yield management is particularly suitable when selling perishable products, i.e. goods that become unsellable at a point in time (for example air tickets just after a flight takes off). Industries that use yield management include airlines, hotels, stadiums and other venues with a fixed number of seats, and advertising. With an advance forecast of demand and pricing flexibility, buyers will self-sort based on their price sensitivity (using more power in off-peak hours or going to the theatre mid-week), their demand sensitivity (must have the higher cost early morning flight or must go to the Saturday night opera) or their time of purchase (usually paying a premium for booking late).

In this way, yield management's overall aim is to provide an optimal mix of goods at a variety of price points at different points in time or for different baskets of features. The system will try to maintain a distribution of purchases over time that is balanced as well as high.

Good yield management maximizes (or at least significantly increases) revenue production for the same number of units, by taking advantage of the forecast of high demand/low demand periods, effectively shifting demand from high demand periods to low demand periods and by charging a premium for late bookings. While yield management systems tend to generate higher revenues, the revenue streams tends to arrive later in the booking horizon as more capacity is held for late sale at premium prices.

Firms faced with lack of pricing power sometimes turn to yield management as a last resort. After a year or two using yield management, many of them are surprised to discover they have actually lowered prices for the majority of their opera seats or hotel rooms or other products. That is, they offer far higher discounts more frequently for off-peak times, while raising prices only marginally for peak times, resulting in higher revenue overall.

By doing this, they have actually increased quantity demanded by selectively introducing many more price points, as they learn about and react to the diversity of interests and purchase drivers of their customers.

Ethical issues and questions of efficacy

Some consumers are concerned that yield management could penalize them for conditions which cannot be helped and are unethical to penalize. For example, the formulas, algorithms, and neural networks that determine airline ticket prices could feasibly consider frequent flyer information, which includes a wealth of socio-economic information such as age and home address. The airline then could charge higher prices to consumers who are between certain ages or who live in neighborhoods with higher average wealth, even if those neighborhoods also include poor households. Very few (if any) airlines using yield management are able to employ this level of price discrimination because prices are not set based on characteristics of the purchaser, which are in any case often not known at the time of purchase.

Some consumers may object that it is impossible for them to boycott yield management when buying some goods, such as airline tickets.

Yield Management also includes many noncontroversial and more prevalent practices, such as varying prices over time to reflect demand. This level of yield management makes up the majority of yield management in the airline industry. For example, airlines may price a ticket on the Sunday after Thanksgiving at a higher fare than the Sunday a week later. Alternatively, they may make tickets more expensive when bought at the last minute than when bought six months in advance. The goal of this level of yield management is essentially trying to force demand to equal or exceed supply.

When yield management was introduced in the early 1990s, primarily in the airline industry, many suggested that despite the obvious immediate increase in revenues, it might harm customer satisfaction and loyalty, interfere with relationship marketing, and drive customers from firms that used yield management to firms that do not. Frequent flier programs were developed as a response to regain customer loyalty and reward frequent and high yield passengers. Today, yield management is nearly universal in many industries, including airlines.

Despite optimizing revenue in theory, introduction of yield management does not always achieve this in practice because of corporate image problems. In 2002, Deutsche Bahn, the German national railway company, experimented with yield management for frequent loyalty card passengers. The fixed pricing model that had existed for decades was replaced with a more demand-responsive pricing model, but this reform proved highly unpopular with passengers, leading to widespread protests and a decline in passenger numbers.

Experimental studies of yield management decisions

Recently, people working in the area of behavioural operations research have begun to study the yield management decisions of actual human decision makers. One question that this research addresses is how much might revenues increase if managers relied on yield management systems rather than their own judgment when making pricing decisions. Using methods from

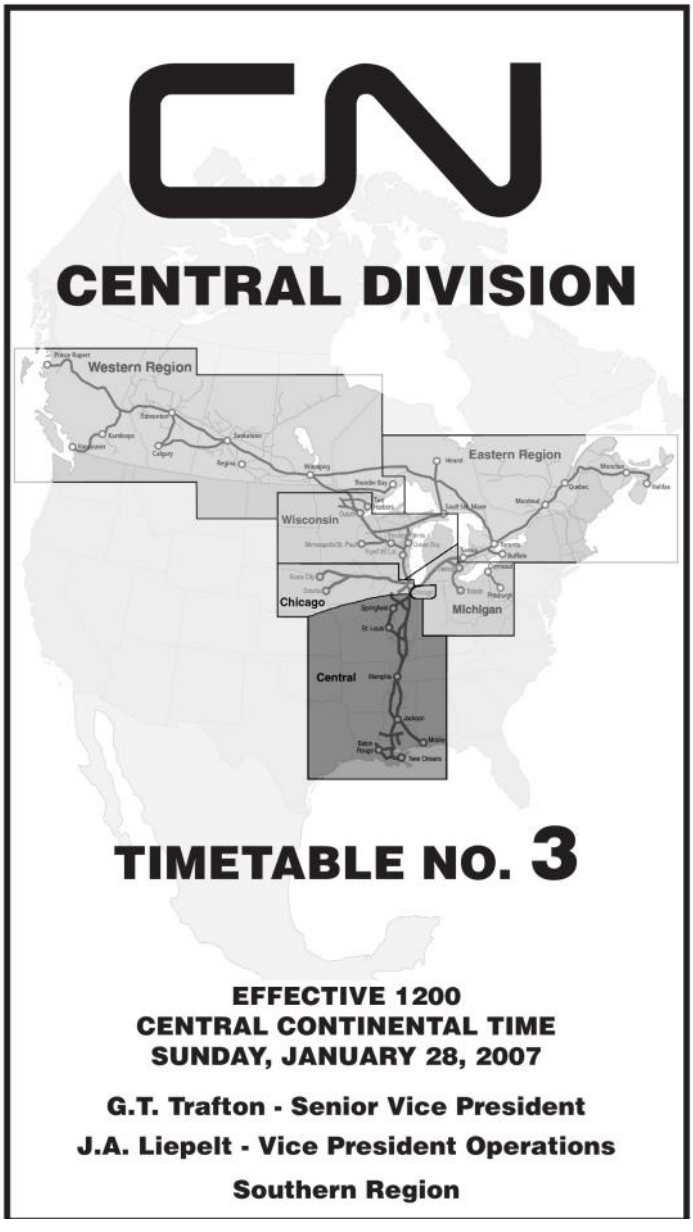
experimental economics, this work has revealed that yield management systems are likely to increase revenues significantly. Further, this research reveals that "errors" in yield management decisions tend to be quite systematic. For instance, Bearden, Murphy, and Rappaport showed that with respect to expected revenue maximizing policies, people tend to price too high when they have high levels of inventory and too low when their inventory levels are low.

-From Wikipedia

Precision (Scheduled) Railroading

Precision railroading attempts to minimize the number of times on each journey a freight car must be sorted in classification yards such as Fort Worth, Texas.

Precision railroading or precision scheduled railroading (PSR) is a concept in freight railroad operations pioneered by E. Hunter Harrison in 1993, and adopted by nearly every North American Class I railroad. It shifts the focus from older practices, such as unit trains, hub and spoke operations, and individual car switching at hump yards to emphasizing point-to-point freight car movements on simplified routing networks. Under PSR, freight trains operate on fixed schedules, much like passenger trains, instead of being dispatched whenever a sufficient number of loaded cars are available. In the past, intermodal trains and general merchandise trains operated separately; under PSR they are combined as needed, typically with distributed power. Inventories of freight cars and locomotives are reduced and fewer workers are employed for a given level of traffic. The result is an often substantial decrease in railroad operating ratios and other financial and operating metrics at the cost of less-reliable service (particularly to smaller customers), long-term capacity issues, and possibly increased derailments and



other safety risks associated with longer trains and crew fatigue.

History

Harrison first introduced PSR at the Illinois Central Railroad (IC), where he became CEO in 1993. He implemented it at Canadian National after they acquired IC in 1998. After retiring from Canadian National, Harrison was recruited to take over leadership of the Canadian Pacific and implemented precision railroading there. In March 2017, he was appointed CEO of CSX Transportation and began implementing PSR on its large network, but he died eight months later.

Criticism

Precision railroading has been criticized on many fronts. Shippers complain about poorer service and delays. Railroad workers have raised concerns about safety due to reduced inspections and staffing. Under PSR, service is typically eliminated on shipping lanes and origin-destination pairs that have low traffic levels. Intermodal terminals have been consolidated, with the railroad relying on trucks for the last hundred miles. Fewer workers are needed, even with higher traffic volumes. As a result, over 20,000 railroad workers were laid off in 2019. The Surface Transportation Board estimates large freight carriers employed 30% fewer workers in 2022 as compared to 2018.

PSR advocates claim that shippers benefit in the long run from reduced costs and more reliable schedules. However, PSR has been criticized as being focused on short-term financial benefits at the expense of long-term capacity. In particular, Precision Scheduled Railroading is impacting safety due to increased train length, up to three miles (5,000 metres) in many cases. This leads to a higher risk of derailments as well as crew stress and fatigue due to the difficulty of operating trains of this length, for which the North American railroad network was not necessarily designed.

—From Wikipedia

Comment on this article – Letter to the Editor

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