# **Roster Notes**

1995/96 Renumbering 1964 New York World's Fair Coaches **Ex-Birmingham Pullmans** The trolley crisis of 1984 Canadian Car & Foundry/Brill T44 Flyer E800s E800 #2649 S8H5304A Link service in Maple Ridge Orion II Seattle D900s The 2400's MC5 **BC Transit Disposal policy** Flyer E901A trolleycoaches (2700 series) T6H5306 Coaches MCI TC40102N Coaches Orion 01-501 (6701-6710) **AVL (Automated Vehicle Locator)** Victoria Double-Deckers **Electronic Signs Leased Vehicles** Skid-trol

**Ballard Fuel Cell buses** 

Roster Notes, The Next Stop **Dennis Darts** TransLink's new fareboxes **Specifications Transmissions** Fishbowls sold to Alberta 2825 **Invero** TDH5303 2063 2751:Last bus to Renfrew Loop 9207 R8060 **Wartime Deliveries On-board Advertising** <u>D60</u> Victoria D40LF transmission Fleet Colours 2002 Tridents 9011 **Tridents Custom transit (BC Transit)** Last Fishbowl **Bodywork** When were the 2002 Tridents built? **APTA Convention** 

# 1995/96 Renumbering

All Lower Mainland-based buses (excluding trolleys and West Vancouver) were renumbered in a new permanent series, during the Winter of 95/96. Garage identification using the "thousands" scheme was replaced by a prefix:

- Oakridge (former 3000, now "V")
- Burnaby (former 5000, now "B")
- Surrey (former 7000, now "S")
- North Vancouver (former 4000, now "N")
- Port Coquitlam (former 9000, now "P")

Trolley coaches have always been numbered in the 2000 series, while PSL took the 6000 series, and Victoria the 8000 series. Some older coaches due for retirement although renumbered on paper, never actually wore their new numbers. Richmond Transit Centre (R) was added to the scheme when it opened in 2001.

### 1964 New York World's Fair Coaches

For the 1964 New York Worlds Fair Greyhound bought 100 vehicles, inc. 40 SDH5302. After the fair, they were to go Pacific Greyhound for San Francisco commuter runs, but instead they were sold. Pioneer Bus (Houston, Tx) took 10 and ran them without renumbering. Rapid Transit of Houston took over Pioneer, but didn't renumber the buses. Houtran (Harris County) took over from Rapid Transit and sold the buses to B.C. (Vancouver Island Transit Ltd.) in Victoria.

## **Ex-Birmingham Pullmans**

From Brian Kelly's book "Transit in British Columbia: The First Hundred Years":

Faced with a sudden increase in rider ship and not enough buses, the BCER bought 25 used **trolley** coaches from Birmingham, Alabama. They entered service beginning 57/3/7. Made of steel, they were almost twice as heavy as the aluminum Brills. Operators found them awkward to drive and they were assigned to the 41st and Broadway lines which were flat and straight.

The increase in rider ship was not as great nor long-lasting as expected and the Pullmans were retired within three years.

In PCC From Coast to Coast authors Schneider & Carlson mention that these coaches were fitted with door engines from scrapped BCER PCC cars.

# The trolley crisis of 1984

Diesel coaches were borrowed from Victoria by Oakridge in 2/84 to ease a severe equipment shortage at Oakridge **Trolley**. The shortage was caused by large numbers of E901A/E902 trolleys sidelined with electrical problems. Most, if not all, coaches were inactive in Victoria at time of loan, and retained their Victoria fleet numbers with addition of the prefix **6**. Livery was either UTA orange or old MTOC, all coaches being eventually repainted into BC Transit red/white/blue. The single reel destination signs were not converted to the Vancouver-standard dual electric; the coaches used older Oakridge single reel curtains.

Coaches remained in Vancouver after the Flyers returned to service to help with heavy EXPO 86 loads. They were renumbered into the Vancouver number series as outlined. All were either retired, transferred or returned to Victoria by 3/87.

Jim Bowman

# Canadian Car & Foundry/Brill T44

Vehicles ordered but not delivered, diverted with permission of BCER to Regina, SK to replace coaches destroyed in fire at Regina Electric Railway car shops on January 23, 1949

# Flyer E800s

These coaches had dual rear exit doors, and were built with electrical gear salvaged from 2000 series and used Kitchener PUC CCF/Brill T-44s in 1976. **MB**: In addition to the jerky air throttles, I recall that GE did a poor job of rebuilding the ex-Kitchener motors and controls, giving the E800's a bad reputation amongst the mechanics.

MB: I remember talking with Larry Miller when the current E901A/E902 Flyer trolleys were ordered in the early '80's; the original plan was to order only 200 and retrofit the E800's with Westinghouse motors & choppers. However, at the last minute Miller negotiated a low-cost option for an additional 45 brand new trolleys, bringing the total order to 245. This, together with the trolley service reductions brought about by Skytrain, probably contributed to the decision to park the E800's and eventually convert them to diesels.

2601-2650 were retired in 1984. 2601-2624 returned to service May 1986 for EXPO 86, and retired again 11/86.

### E800 #2649

5198: ex Oakridge Transit Centre **trolley** 2649, drive train ex D700A, to Oakridge Transit Centre Diesel powered overhead deicer 3151. This was the second unit converted. It was originally out shopped as #5198, but was returned and converted into a de-icing unit, numbered 3151. Tubing was run from an anti-freeze tank to the **trolley** poles, which were electrically dead and equipped with spray nozzles. Originally the bus ran in passenger service with poles in situ during the summer months. However, negative comment from passengers and drivers persuaded BCT to remove the poles during the summer.

The triesel conversion programme (1987-90) fitted drive trains from retired D700A coaches into the E800's. After union concerns about mould were investigated and remedied by "cooking" the coach, the coaches settled down to service at BTC. They were displaced by the arrival of the low-floors in 1998. Some were placed in store, and some were sent to STC. As a class, the triesels in service lasted until Spring 1999. B1131 was the last triesel to operate from BTC. Last run for it was on March 19. All are marked for scrap, except following V1109, V1110 and B1144. The de-icers will continue to run throughout the OTC routes, with B1144 saved for parts. (TM) Workstations and engines are being removed before scrapping. (DL)

#### S8H5304A

All 3200's ordered with 8-71 engine, solenoid electric shift switch on dash. Air conditioning disconnected. Factory anti-skid system disconnected at manufacturers request. Maxi valve mounted on tower in centre of aisle removed and mounted in normal position at left of operator. Full gauge set on instrument panel. Coaches were bought by BC Hydro and used for six months, then were loaned to Pacific Stage Lines, for use in the Port Coquitlam area prior to service being provided by BC Hydro in that area. They returned to the BC Hydro fleet in 1976, and were placed primarily on two freeway routes operating to Tsawwassen and White Rock. These two routes, incidentally, are the two longest single routes in the Vancouver system.

Jim Bowman

# Link service in Maple Ridge

Dial-A-Ride service offered in parts of Maple Ridge. Operated by Independent Bus & Truck under contract to Municipal Systems. Buses numbered with a "C" prefix. Service, vehicles and some drivers transferred to Port Coquitlam Transit Centre. Buses renumbered into 9xxx. The buses, National REs, were lightweight and according to some transit personnel, not suited to heavy transit use. They were transferred back to the Municipal Systems fleet with the arrival of the Orion IIs.

### Orion II

Labelled "CUB", for Community Urban Bus; The fleet was parked on June 25/97 after a driver nearly fell asleep at the wheel. A transit supervisor rushed the driver to hospital, where tests indicated that the driver was suffering from carbon monoxide poisoning. Repairs carried out, some buses returned to service 12/97.

<u>Document</u> details modifications. Despite these modifications the buses proved to be unsuitable for BC Transit use, and were offered for sale. As reported on BCTV's **News Hour**, Friday, February 19, 1999:

#### ANOTHER SHINING EXAMPLE OF GOVERNMENT WASTE

(BCTV) - How much will this one cost you? You won't know for a while. What's the problem? Put simply, it's a parking lot full of new transit buses going nowhere. These buses were bought with your tax dollars to solve a problem. But instead they've created one. City drivers say they're lemons with problems that can't be fixed. The whole fleet has been sitting here out of service for months. But zero income and expensive repairs are not all that's costing you money. Now the buses will have to be sold. The transit union says you're going to take a bath on that as well.

#### Brian Coxford reports:

"They haven't carried a passenger in a year. Bought by B.C. Transit two years ago, they have been plagued with problems...so many safety concerns... bus drivers won't take them out. And now the 19 mini buses are on the block and as tax payers we'll likely be left paying millions dollars for a bad deal." Don MacLeod, Interim Pres., ICTU: "It ranges from noise problems to vibration. Two of our drivers were taken off over exposure to carbon monoxide...vibration, heat, noise smell, problems with the brakes. At one point Transit warned passengers not to stand while the buses were moving. The drivers say that was because of an advisory they got over concerns about the brakes. Mechanics tried a modification on the exhaust to see if that would keep the fumes out of the interior and that didn't seem to solve the problem either." Brian Coxford: "Many of these mini buses parked for months have day trip cards in here...They are filled out by drivers...This one dated July 20, 98...and the reason they fill them out is if there are any problems...It says check for diesel fumes." Don MacLeod: "All sorts of tests were done on them, but eventually they could achieve a liveable environment within the coach as far as eliminating all the fumes...noise...vibration." Brian Coxford: "The mini buses are tucked away at the rear of the transit yard in Burnaby waiting for a buyer. Bought for just over \$4.5-million from Orion in Ontario, the 30-seaters were supposed to be used for community short hauls...on the block for three weeks... 26 transit companies in U.S. and Canada have asked for information packages, but with ten days left, so far, there are no bids. The union representing drivers worries taxpayers are going to get stiffed..." Don MacLeod: "The guess is ten cents on the dollar...that low...yeah...Not a heck of a return...No it isn't. It would turn out to be a very bad investment." Brian Coxford: "Transit, of course, is hoping any bid they get will be higher...And one more twist of fate...the buses were originally destined for Florida, but the transit company reneged on the purchase because of air conditioning problems...B.C. bought them thinking we don't need air...but it turns out when the air conditioning is on, it apparently solves the problems with fumes."

Announcer: "This particular type of minibus - bought with good intentions - is presently being used by 75 different transit services across the continent. Toronto is running a 150 of the buses, successfully, right now. So B.C. Transit says that it's still confident that a buyer will be found."

And, indeed a buyer was!

March 24, 1999

BC Transit Board Approves Sale of Orion II Minibuses to Utah Transit Authority of Salt Lake City

The Board of BC Transit has approved the sale of 19 Orion II minibuses to the Utah Transit Authority (UTA) in Salt Lake City. The UTA bid for the all 19 buses and related parts is \$1,451,883 U.S. dollars (approx. \$2,208,459 Canadian dollars). The UTA currently operates 51 Orion II buses in its Dial-a-Ride service.

BC Transit took delivery of the Orion II minibuses in the spring and summer of 1996. The buses were used in Langley, Surrey, New Westminster, Maple Ridge and White Rock, to service routes having limited customer numbers, or in areas in which full-size buses could not maneuver. The original cost for the Orion II buses was \$241,162 each.

Service and safety concerns have prevented consistent service with the Orion II buses, and they were taken out of service in June of 1998.

On some routes serviced by the smaller buses, passenger loads increased until they exceeded capacity. This resulted in buses having to pass up customers, or caused inefficient and expensive bus changes (i.e. larger buses for peak periods, minibuses for off-peak periods).

Extensive testing and retrofitting by BC Transit and Orion also failed to remedy maintenance and safety concerns to BC Transit's satisfaction. Further, the Orion II minibuses are generally expensive to maintain, and any further modifications could add to that expense. The total cost of the modifications, repairs and testing is estimated at \$175,000. The manufacturer has covered \$125,000 worth of the work (71%) under warranty.

### Seattle D900s

Towards the end of 1997 it was evident that BC Transit had an extreme bus shortage. To help, second-hand coaches were obtained from Metro Transit, Seattle, WA and Community Transit in Everett, WA. The D900s from Seattle were placed in service 97/12. They remained in their Seattle colours, working from Surrey Transit Centre. They were in poorer shape than the D800s obtained from Community Transit and most were retired before the end of 1998. The coaches were sold to ABC Bus in Ca. for reconditioning and sale to Mexico. A contractor began removing them from BCTSP 99/1-2; evidently a handful were unable to be driven, these remained behind, with at least three attended to by BC Transit. One was used in a movie, shot in downtown Vancouver. Gastown, by the ex-Woodward's parkade, stood in for war-torn Saravjo, with the coach suitably damaged. Apparently one, 1802, was retained by CMBC.

### The 2400's

The 2400's also had unpainted metal seat backs, heralding a trend that was to be repeated in motor bus deliveries: first of 18 CD-52A's from Canadian Car in 1957 and 1958, followed by the large fleet of GM "Fishbowls" that started to arrive in the early 1960's. And the 2400's had "upside down" windows that never seemed to stay up properly. Otherwise, they were similar to the hundreds of other T-48's and T-48A's that had been received over the preceding five years.

As the 2400's were a small group, they were not part of the everyday scene. It was a rare occasion indeed when a 2400 showed up. In later years they seemed to spend most of their days plying the busy 9-Broadway route.

Two 2400's survived to the last days of Brill operation in Vancouver and the very last, 2416, has been preserved in operating condition and sees occasional use on TRAMS excursions.

Know the fleet: 2400 spotting features

First and foremost were the downward opening upper windows, designed to prevent drafts on seated passengers while affording ventilation to standees. A subtle but not unappreciated difference was the substitution of a chrome script "Canadian Car" badge on the front panel, replacing the familiar roundel which was covered up by the first repainting of earlier members of the fleet. It would appear that the 2400's were delivered with the deeper windows in the upper panels of the front doors (to allow for better side vision); this modification became standard on other members of the fleet as replacement doors were added. 2415 and 2416 alone had larger roof ventilators than other members of the fleet. Inside, in addition to the 2+1 seating with bare metal seat backs already mentioned, was the large Canadian Car builders plate displayed prominently on the front dash, replacing the smaller emblem on the back of the destination signbox, and the serial number plate adjacent to the door master switch, that was provided on earlier series.

Courtesy: Vancouver's Trolley Coaches

### MC5

MC5's produced for Canadian market were known as MCC5. Similarly for the MC5A, however by the time the later variants were produced the extra 'C' was no longer used.

## **BC Transit Disposal policy**

Apparently, it is BC Transit policy not to dispose of vehicles to individuals or companies who could use them for carrying passengers. (Dale Laird). The Brills were sold to Richmond Steel Recycling for scrapping. Richmond Steel Recycling discovered that the coaches would cost more to scrap then the recoverable metal was worth. Richmond Steel then sold them to United Auto Parts where they are today. United is not bound by the original agreement. Dale also points out that the air cadet squadron that obtained a T6H 5308 in 1997, did so by telling BC Transit it was for parts only.

# Flyer E901A trolleycoaches (2700 series)

These buses were delivered in UTA orange and blank paint scheme. They were later repainted into the BC Transit red, white and blue colours. The sign cap and windshield area was black. Later this was amended to white in continuation of the overall scheme. (Jim Bowman)

## T6H5306 Coaches

These coaches delivered with high-speed rear ends for highway operation. Push button, back lit transmission shift. (Jim Bowman)

### MCI TC40102N Coaches

All 920 (Victoria) coaches equipped with 6V92TA turbo engines, deluxe seating, rear window option and new style engine tailcap. (Jim Bowman)

# Orion 01-501 (6701-6710)

First assignment for this group was Victoria--used to inaugurate service to Peninsula and western communities, transferred upon arrival of 837-865 (LB). See specifications below .

# **AVL (Automated Vehicle Locator)**

7101-9 have a small fin about 20-30cm in length above the front door. This is the antenna for the AVL (Automated Vehicle Locator), using GPS. The system is being tried on Route 123. System is by Rockwell and has the paddle in a computer. It was fitted in late 1998, or early 1999.

## Victoria Double-Deckers

This does not mean the Tridents! Blue Line/White Line RT/RTLs were also numbered into the 200 series for London Transport duties; only one (205) operated beyond the mid 1980s, to 1993. another (206) was used for a ticket bus at one of the stands through 1990. 201, 206, 207, not painted into union jack colour scheme. Most or all units sold to private owners early-mid 90s; one of the red RTLs is now a restaurant in Campbell river. (Les Broughton)

## **Electronic Signs**

There are three types of electronic signs used by BC Transit/TransLink buses:

- Luminator MEGA MAX 2000: Green Flip Dot with fluorescent lamps.
- Luminator MEGA MAX 3000: Green LED sign.
- Balious: Orange LED sign

### **Leased Vehicles**

Usually, most vehicles are purchased by BC Transit. There are notable exceptions, for example, the two seabuses are leased from Xerox. Some of the 98xx N.F.I. Low-floors are owned by NJC Leasing. Trolleycoaches are also leased, (owner is identified as "Canada" in rosters.) Certain Municipal Systems buses were sold to a leasing company and leased back.(This information is presented as is and needs clarification.)

## Skid-trol

GM advised all customers with "**Skid-Trol**" systems to disconnect these systems in March 1979 after a series of mishaps in New York/New Jersey.

BC Hydro did disconnect the "**Skid-Trol**", which was the little aux. pod mounted on the top r/h corner of the instrument panel. It contained a "test" button and indicator lamp which was supposed to confirm the system was working properly. A metal disk with slots in it was mounted on each wheel hub and an infrared beam was sent through it. If the wheel locked the beam would remain broken or unbroken (unmodulated) and a valve would release the air pressure to that wheel. The flaw in the design was that dirt and grime also blocked the slots in the disk and the air pressure would be released to the wheel when it really wasn't locking up, resulting in an uncontrollable spin.

(Jim Bowman)

## **Ballard Fuel Cell buses**

P7244-6 were handed over to BCT at Science World, 98/10/23; Entered service from PCT on initially on am journeys only on 158/159; Equipped with cell phones instead of radio; aluminum wheels instead of cast iron, and limited to 40 (a seated load) passengers because of weight of bus. "Powering the Future" by Tom Kopel, (Wiley Canada) presents insight into the development of the Ballard fuel cell.

### **Dennis Darts**

An Internet posting from Mike Davis, Acting Division Manager, Planning and Marketing - BC Transit:

We have been looking for double deck buses as well as smaller vehicles for a number of years. Our service concepts called for these vehicle types and our fleet guys have been watching the world marketplace for the most reliable and suitable types of equipment to meet our service plans. We're patient.

Regarding Neoplan we had a test bus up here in 1994? or so. The decision was made as all purchases should be - on the basis of cost, quality and product design and suitability. Neoplan (I believe) had some difficulties as far as our fleet people were concerned in providing a bus suitable (and certified) for urban transit (as opposed to highway coaches).

The Dennis DARTs we purchased do not really have a competing North American product. The Orion IIs probably come closest and we do not find their track record too positive.

Regarding a buy Canada position, I guess I could be snippy and say that as opposed to our American friends we really do support free trade - but rather the issue is more buying the right vehicle for the job. We have had talks with Dennis regarding ways to increase the Canadian content in future orders (such as seats etc) but even this may not be necessary as corporately they are taking a position in the North American market over the next year. (I think they bought into Mayflower).

Anyway - that is a planner's perspective - real details would have to come from our fleet group.

## TransLink's new fareboxes

Greater Vancouver's transit authority is spending almost \$26 million to modernise its fare boxes - but you'll still need correct change to ride the bus.

Directors of TransLink unanimously supported the expenditure at Wednesday's board meeting, and bus passengers will begin seeing new automated fare boxes later next year.

The fare boxes are based on technology developed for the New York City Transportation Authority, and can count change, print out and read custom transfers and read a magnetic code on monthly bus passes. They will replace fareboxes so old they were first installed in 1974 Ä that parts are no longer available when they need repair.

"You will put in your money, it will count it automatically and issue you a transfer. That transfer will be coded so that when you go on to your next bus and put it in, it will read it," said Paul Clarke, media-relations manager for Coast Mountain BusLink.

The cost of purchasing and installing automated fare boxes was estimated in 1997 by BC Transit and the defunct Vancouver Regional Transit Commission to be \$19.8 million. It jumped to \$25.8 million with the addition of transit pass validators at SkyTrain stations, delays in implementing the system, as well as design changes and installation costs.

TransLink has already spent \$7 million on the project, and estimates that annual cost savings from the system could reach \$3.7 million, including \$2.5 million in fare evasion. In addition, the authority expects the number of disputes between drivers and passengers over fare payments and transfer validity will be reduced. (Vancouver Sun, June 24)

# Specifications:

Peter McLaughlin:

D40LF:

- 8026 to 8028 built March 1993 with the 6V92TA engine and the Voith D863 trans., Luminator destination signs and Sutrak rooftop mounted heating AND air conditioning.
- 8029 to 8033 built in late 1992 with the 6V92TA engine and the Voith D863 trans., Luminator destination signs and Sutrak rooftop mounted heating AND air conditioning.

- 8066 to 8094 built in 1995 with the Series 50 engine and the Voith D863 trans., Luminator destination signs and Sutrak rooftop mounted heating AND air conditioning.
- 9701 to 9749 built in late 1996 with the Series 50 engine and the Voith D863 trans., Luminator destination signs and Sutrak rooftop mounted heating AND air conditioning.
- 9831 to 9856 and 9861 to 9878 built in mid 1998 with the Series 50 engine and the Voith D863 trans., BALIOS destination signs and Sutrak rooftop mounted heating AND air conditioning.
- 8001 to 8009 built December 1991 with 6V92TA engines and Voith D863 trans. Luminator destination signs, and rooftop forced air heating systems.
- 8010 to 8025 built late 1992 with 6V92TA engines and Voith D863 trans. Luminator destination signs, and rooftop forced air heating systems.
- 8034 to 8048 built in June and July 1994 with Series 50 engines and Voith D863 trans. Luminatordestination signs, and rooftop forced air heating systems.
- 8049 to 8065 built in 1995 with Series 50 engines and Voith D863 trans. Luminator destination signs, and rooftop forced air heating systems.
- 8095 to 8117 built in early 1996 with Series 50 engines and Voith D863 trans. Luminator destination signs, and rooftop forced air heating systems.
- 9815 to 9828 and 9880 to 9891 built in 1998 with Series 50 engines and Voith D863 trans. Balios destination signs, and rooftop forced air heating systems.
- West Vancouver NFI D40LF buses are equipped with the DD Series 50 engines and Voith D863 transmissions and have the roof top forced air heating systems.
- Victoria's 1990 Orion 05.501 buses were delivered with the 6V92TA engines and the HTB-748 trans. numbered 600 to 609. 610 was the only 1991 Orion 05.501 and was delivered with the 6V92TA engine and the Voith D863 trans
- All of the 1991 NFI D60 artic buses in Vancouver have the 6V92TA and the Allison HTB-748 transmissions along with all of the 1991 NFI D40 buses too. Translink #'s N3254 and N3255 have the Allison B400R4. All of the 1992 NFI D40's also have the same drivetrains except that the 6V92TA engines in the 1992's have a slightly smaller horse powered engine than the 1991's. (Jeremy Higdon)

## **Transmissions**

Andrew Gold: The two NFI D40 buses that have the Allison World in Vancouver were not retrofitted with those transmissions. They had them from the factory. BC Transit wanted to test the World series before buying more. They were not unhappy with the HT series. I rode on one of them last fall and it still has the World trans of course. They weren't "trying" the powertrain on such a large order of vehicles. They conducted an extensive industry evaluation before placing the 130-bus order in 1989.

Jeremy: The transmission noise on the Vancouver D40s is typical for the older Allison HT740. It is due to their use of straight cut gears rather than helical gears. They make more noise, but there is actually less friction and probably less heat as well. I prefer Allisons to Voiths, myself, though the V730 series seems to be a better bus transmission than the HT740. I wonder why BC Transit specified the T-drive for their D40 order . . . .

The Allison V731 circa 1990 was much better than the Voith of the same era. Less jerky, no retarder hiccup, didn't lug the engine, less shifting. Even in 1994, that was true. I've ridden Flxibles with the Cummins M11/Voith as well as with Series 50/VR731RH. The buses with Allisons/Series 50 are quite smooth compared to the Voith/Cummins models, with less shaking, engine lugging, etc. Newer Voith transmissions seem to be better, and the Allison VR731RH is no longer available.

U.S. artics typically have 325 or 330 hp 6V92TAs with the HTB748. I guess Vancouver figured 277 would be enough (for their D60s) because they weren't getting A/C. Still, 277hp is a little low for 39000 pounds. The shift speeds depend on axle ratios, transmission programming, and individual variation between buses. (D60's also are fitted with a retarder.) Often, the B400R will have a shorter ratio than the HTB748, because the former has an overdrive. As I recall, Vancouver D40s top out at around 100 km/h with the HTB748. That means they probably shift at some where around 60-65 km/h. Orion V's: Allison B500-R transmission. Victoria's new Double Deckers have the Cummins M11 Engine (Now known as Cummins ISM) with a Voith D864 (Yes the 4 speed version) transmission in those buses.

Orion V: Detroit Diesel Series 50 275 h.p., Allison B500R transmission with optional sixth gear. The D60LF

coaches only have the basic five gears. Our D40LF coaches have the B400R transmission.

Peter McLaughlin: Vancouver's 1991 and 1992 fleet of D40's and the fleet of 1991 D60's were all built with the Allison HTB-748 transmission. Vancouver wasn't too happy with their V731's that came in their fleet of 50 1989 MCI "Classics". I found them a bit rough shifting compared to the older 1987 GM "Classics" which also had the V731 transmission. I believe this was the reason why Vancouver decided to try the Voith D863 transmissions in their fleet of 85 1990 MCI "Classics" which also did not work out very well in the beginning. I guess they decided to try out the T-drive configuration in the 1991-92 New Flyer order with the 6V92TA engines and the Allison HTB-748 transmissions.:

### Fishbowls sold to Alberta

PM: January, 2001 --- In transit-victoria@egroups.com, NovaBus wrote:

A friend of mine - Martin Parsons and myself were at the County of Strathcona Transit Garage last Wednesday and discovered that they have purchased three Ex-BC Transit Victoria 1981 GM model T6H-5307N's which used to be Victoria #'s 837, 843, & 856. These units are now numbered 911 (Ex-837), 912 (Ex-843), and 913 (Ex-856).

LB adds: Realized some hours after reading the post about the Victoria fishbowls in AB that these units were leased by BCT, so without knowing the details yet, I suppose BCT the lease company and Strathcona County came up with a deal that got BCT out of a years lease on the three, while maintaining service using the 1974s which they own till the Darts come into service.837, 843, and 856 went direct from active duty to new owner, while 855 and 859 remain in store.

## 2825

99/09/16: A single vehicle accident at East Broadway & Ontario this morning involving Trolley Coach 2825. Here is the clipping:

TRANSIT BUS ACCIDENT (BCTV) - Two people were injured and a Vancouver transit bus was totalled in an accident during the early morning commute. The accident occurred at Ontario and West Broadway shortly before seven this morning. Police say the bus driver lost control while travelling eastbound, jumped the curb and struck a power pole that crashed through the front of the window. One of the five passengers on board was taken to hospital with bruising and chest pains. The 41-year-old bus driver was taken away for observations. Police say charges are not expected.

March, 2000: Coach is back on the road, with the front end off V1164, a D902. The coach has been painted in the CMBC "Sweep", but the front destination signs are still from a D902 i.e. wider route number, narrower destination compared to the E902 destination signs. (DC)

### Invero

DC: I was told it's Italian for "new and innovative idea"... A bit of trivia: this is not the first bus that New Flyer has given a name to, other than a model number (e.g. D40, D40LF, D40i...). The first D40LF was called "TUF", for "The User Friendly" lowfloor coach. The first D60's were called "Galaxy".

#### TDH5303 2063

This coach was in temporary service in Vancouver equipped with an experimental dual fuel (diesel-natural gas) system which operates on as little as 30% diesel. Interlock ensures that bus always starts on 100% diesel. The coach has been painted in several schemes in recent years.

- 1) BC Hydro sky blue with white roof (1985)
- 2) Yellow with blue `Natural Gas To Go' logo (1986)
- 3) standard red/white/blue BC Transit paint scheme (8/87)

JB says "AFAIK the conversion was experimental work done at Malaspina College; the coach was tested in revenue service in Nanaimo before getting new livery and # and becoming the CNG poster bus.

It was retired in 1989.

[Said to have gone on North American Tour, may have carried 6910 at sometime]

Jim Bowman

## 2751:Last bus to Renfrew Loop

2/09/01:In order of appearance, Wally Young, Derek Cheung, Alan Mihatov, Kevin Nash, Angus McIntyre, Richard DeArmond and Lawrence Eyre rode coach 2751 as the last "9 Broadway to Renfrew" into the Renfrew Loop at 18:04. Numerous other photos were taken of coaches in the loop earlier in the day when the light was better.

With the closure of this bus loop, I believe there are no more wooden traction poles holding up trolley overhead save the occasional pole which also holds up hydro wires. The land on which the Renfrew Loop is situated will be redeveloped into an hi-tech industrial park. Just south of the Renfrew Loop is already a new street with a name that reflects the coming hi-tech companies: Virtual Way.

Derek Cheung

### 9207

2/27/01 The first Orion V Express Bus was delivered to RTC yesterday afternoon. It is coach # R9207. PDI work being done in the shop, not available for pictures yet. No word on when they will enter service. They should all be in service by April.

John Wollenzin

## 8060

01/09/06: R8060 damaged from the front door to the last axle. Apparently the driver of a Mercedes Benz got confused with the signals on north bound Three Road just before Aberdeen Station (Cambie Road). The bus got the signal to go ahead on the green arrow for the bus lane and the Mercedes confused this signal with the left turn signal and proceeded. The left turn signal for the Mercedes was red at the time that the Mercedes made the left turn.

John Wollenzin

## **Wartime Deliveries**

Transit was so heavily used during the second world war, the allocation of scarce resources was the responsibility of the War Allocations Board in Ottawa. It, through the Office of The Transit Controller, decided where vehicles should go. The board was headed by Sig Sigmundsen, who later became transportation manager for BCER. Buses were painted in olive green or gray. The most obvious outcome was that companies had little choice as to what vehicles they received.

# **On-board Advertising**

Dec. 2001. Translink announced it would look at installing tv's on buses to display ads rather than using free newspapers. DK wrote:

"Years ago Trans Ad installed an illuminated sign on several buses in Surrey numbered 7931-7935. The sign was located behind and above the driver. (In other words, if the thing fell off it would land in the lap of whoever was sitting in the 'Courtesy Seats'). The sign would scroll every minute or so. The majority of advertising was for Safeway socks and I think there was some transit ads on there as well, (\$24 Farecards!) plus many blank ones. They lasted for about a year I think."

## **D60**

In early 2002, the D60's were placed in store. Eventually three were sent to West Vancouver. Some of the other remaining coaches were given attention to body corrosion, and sent back to Port Coquitlam. JB says:

"They are the first batch built, of course, so it may well be that they have reached the end of their service life due to frame corrosion, NFI hadn't upgraded the frame until 1992 and the 1987-1991s were well known for structure corrosion."

#### Victoria D40LFs

To: transit-victoria-bcsmsys@yahoogroups.com

Subject: 1996,1998 Victoria D40LFs

From: "les\_broughton" <uw546@hotmail.com>

Date: Wed, 01 May 2002 18:43:27 -0000

The 1996 and 1998 D40LFs in Victoria were temporarily taken out of service when the transmission on one of them locked up in service.

Initially all units with the Voith were grounded, however all but 13 have been returned to service after inspection of the trannies. The 13 units still parked were found to have "debris" in the tranny fluid indicating excessive part wear.

Service disruption has been minimal, mainly reduced low floor/bike rack service, plus way too many Darts on heavy routes such as 6 and 27/28.

1996 D40LFs are 8094-8117.

1998 D40LFs are 9815-9828 and 9881-9891.

## **Colours**

(Les Broughton)

#### Vancouver:

Blue/Green Hydro livery appeared on 1964 fishbowls, and was applied over the course of the 60s to Brill Trolleys and diesels, plus all twin coaches except 41S's operating out of NVTC (retired in 1974; replaced by 1950 44S's xfered from OTC and KTC.

#### Yellow/Orange:

First used early 1973, on ten trial units. Urban diesels and trolley repainted into scheme as part of maintenance cycle. Flyer D700As 5101-30 painted into scheme after arriving all white. Flyer D800s and E800s shipped in scheme, also 1974 T6H5308Ns in x800 series and 1976 T6H 4523Ns. also 2nd hand urban units.

All units painted into 2nd orange/Brown livery 1977-82 except some Brill and Flyer trolleys, and the Prevosts. 3702 (later 4763 painted into experimental orange MTOC scheme in 1982 instead.

#### Yellow/Brown:

All suburban units new and second hand delivered or painted into first scheme, with all brown across the front.

2nd scheme (orange and brown in front) became the repaint scheme for all vehicles beginning 1977, until red/blue introduced c.1983 1977 T6H5307Ns delivered in second scheme.

#### Shopper livery

used on several CD52As used in freebus service 1977-1982

#### Orange stripe

1982 T6H 5307Ns , D901As, and most E90X trolleys delivered with single wide orange stripe, orange across bottom front of coach.

#### red/white/blue

all active units in this livery by early 1986; all new deliveries late 1980s-c.1998 shipped, except special liveries (clean air, AOA, etc.)

#### White

CMBL's indecisive paint job

#### blue/yellow

the current CMBC paint scheme

#### Victoria

Cream/gray hydro only on 746-753 as delivered

#### Blue/Green

slightly different than Vancouver scheme--off white on the front bottom, small hydro logo, different font and placement of fleet numbers-- check BCARS photo of 778 all old look and brill active in 1970 repainted to this livery

### Orange/yellow

some Brills, most 35' bowls, all TDH 4509 4512 and 4801, once again, white not gray on the front 800-820

#### Orange/ brown

South suburbans, 821-834, many 35', TDH 4801 #8705 got this scheme

#### Green / brown

SDM5302s, S8M5303As, SDH5302s in use by VITL and RBL subsidiaries 1975-1980

#### **UTA Orange:**

the big stripe, but with the orange swept over the front roof. Orions used in temp service, 1981-1982 T6H5307Ns, TDH 5303s 900-903 Suburbans 950-958 (ex VITL) 35' 754-762, 764, 770, 773, 783 wore this coat (1978-1983)

#### Red/blue:

universal scheme--952, 960 and 765-776 had the early scheme patterned after the UTA roof sweep. 765-776 later had roof only changed to white Tridents have a swirl design in same shades.

Dark Green/ Light Green:

PSL ("Town & Country")

# **Assignment of new Tridents**

From: "Foord, Chris" < Chris Foord@bctransit.com>

To: 'les broughton' <uw546@hotmail.com> Subject: RE: Assignment of new Tridents Date: Tue, 7 May 2002 10:48:02 -0700

16 for Victoria, 3 for Kelowna. They should all be in place by mid June. Kamloops decided to pass on 3 so we took them in Victoria. If they change their mind we'll ship them up. In Victoria we will use them on routes 4, 14 and 26 in Victoria. All of these routes serve UVic and Camosun College (2 of the 3) where the U-PASS program has meant huge ridership increases.

# **Trident 9011 (1st)**

This Trident was dropped on a single decker bus which was being imported back into the UK while being loaded for transit to Canada. LB says the parts were crated and sent to Victoria.

### **Tridents:**

A couple of additional driver observations/gripes.

Tridents very popular, senior drivers snapping up trident runs, except very long legged ones. The depth of the driver's compartment is limited by the stairwell right behind, so the Recaro seat will not go back as far as tall drivers would like.

Stalk mounted turn signals not well received, after decades of foot mounts. Drivers I have spoken to would prefer if the signals did not shut off when wheels centred. Also, turn signals wired to ignition, so they shut off on layover.

Also, the AC on the Trident that we rode (same coach both ways, amazingly enough) didn't seem up to stuff. Downstairs was fine, but upstairs the AC wasn't doing a good enough job.(LB)

## **Custom transit (BC Transit)**

LEGEND - BUS	TYPE
C100, C200 & C300 series	Lift Equipped Van
C400 series	Micro Bus
C500 & C900 series	Mini Bus
C800 series	Non Lift Equippe
"L" indicates non BC Transit ovehicle	owned

### Last Fishbowl

The last GM fishbowl has roamed the streets of Victoria once and for all. On September 6, Bus #878, a 1982 GMC T6H 5307N made its final trip on Route #2 leaving Central at Patrick at 17:10, terminating at Crescent at Quimper at 17:51, returning to the yard by 18:11. This was the last GM fishbowl in the Victoria fleet and draws a close the faithful service of the GMC New Look, affectionately called the "fishbowl" for its appearance, on the streets of Victoria. Victoria

has had GMC New Looks serving in its fleet from 1961 to 2002. After this trip, #878 was quickly transported to a storage facility to await its disposal.

The GMC New Look, once popular in fleets throughout North America is dwindling in numbers. Once the backbone of the fleet in most major cities in Canada and the US they are a rarity now, unless you live in Toronto or in Quebec. Most systems in the US have been devoid of the New Look for many years as GMC chose to offer their new RTS in favour of the New Look to the US market in the mid seventies.

has been possible to pinpoint the last official trip for this faithful model in Victoria. Fortunately many examples of what may be the most popular model of transit bus ever sold are being preserved. The opportunity to ride these vehicles in revenue service is declining and over the next few years expect to see more and more

Canadian systems see their remaining Fishbowls removed from their

There was no fanfare for this last journey and it is only now that it

fleet.

\_\_\_\_\_

John Wollenzin jwollenzin@canada.com

Vancouver, BC, CANADA

Electric Trolley Coach / Motor Bus Operator

Student of All Types of Public Transport

Specializing In, But Not Exclusive To,

The Greater Vancouver Area

## -----

# **Bodywork**

From: "Stedall, Richard"

Date: Mon Aug 19 08:24:33 2002

To: 'Michael TaylorNoonan'

Subject: RE: Tridents in Langley

Mike,

Ahhhh - this is where it gets complex !!!

Today Plaxton, Alexander, Dennis and the former Duple Metsec are all part of TransBus International (c. 70% owned by Mayflower who were the owners of Metsec, Alexander & Dennis - and c. 30% owned by Henleys - owners of Plaxton).

The first batch of Tridents were ordered and built before TransBus came in to being. The bodies were by Duple Metsec - who only did kit built bodies - someone else always put them together. The original intention was that Plaxton would put the bodies together (like they were doing for some Hong Kong Tridents) - but then the battle for Dennis erupted (Mayflower -vs-Henleys) and the contract was switched to Caetano in Portugal (again a company that had builtup a number of Metsec bodies for HK bound buses). So the original batch had what would be called by the PSV Circle "Duple Metsec / Caetano" bodies.

By the time the second batch was built peace had broken out and TransBus

International formed. At this time the separate Metsec factory was closed
and a new "kit-build" factory opened near Alexander's factory in Scotland.

The Duple Metsec name was kind of dropped, although their designs have
remained. So the new batch are actually Alexander bodies built to the Duple

Metsec design (with me so far ????).

Now to add to the confusion at your end - the "Plaxton Pointer" body on the Dart is no longer built at the Plaxton factory (which builds coaches only) - it is now built at the main Alexander factory (along with Alexander's own ALX range of bodywork - the Thomas SLF200 is based on the Alexander ALX200

Roster Notes, The Next Stop

product) - so your latest batch of Darts are almost certainly "Alexander" bodied vehicles (now I bet you are REALLY confused !!).

TransBus are to replace the entire range over the next few years with "TransBus" products - although the chassis will still be built by Dennis and the bodies by the Alexander and Plaxton (Wigan) plant - the latter still builds double deckers at the former Northern Counties plant.

Already the "full size" single decker product (the Enviro 300) has been launched and the new "export" double decker (the Enviro 500) is apparently due to be launched later this year - at first I think mostly for the Far East, but eventually this will replace the Trident.

So I hope that helps explains things !! Eventually all will become nice and simple - until then CHAOS REIGNS !!!

## When were the 2002 Tridents built?

From: "Richard Stedall"

Date: Mon Sep 30, 2002 10:47 am

Subject: Re: 2002 Dennis Tridents

When I paid a visit to the Dennis factory this time last year construction of the chassis for this batch was just about to start - so yes the chassis are 2001 built vehicles - but the bodies are almost certainly 2002 - just - as I doubt construction on these started before January this year.

### **APTA Convention**

From: "Richard Stedall"

Date: Sun Nov 17, 2002 1:00 pm

Subject: Trident DemonstrationsApparently the Trident that appeared at the

APTA Show in Las Vegas

was then used by CAT on a 2 week trial with passengers being offered cheap fares in return for filling out a questionnaire.

CAT apparently liked it so much they are now seeking funding for an initial order of 25 of the "replacement" model the Enviro 500.

The Trident then apparently went to the Gray Line convention in Beaver Creek, Colorado and on to the the CUTA show in Calgary.

All the above comes from the latest issue of BUSES magazine here in the UK.