

Royal Turf Club Bangkok Thailand

Ron Bird - CDA

Horse racing is the “Sport of Kings” and nowhere is this truer than in Thailand. Not only is the Royal Turf Club (RTC) under Royal patronage but it also has a huge following of loyal subjects.

To cope with the ever-increasing demand of punters, the RTC in early 1970 contracted with Control Data Australia Pty Ltd (CDA) for the supply and installation of an on course electronic Totalisator that could also be used for general data processing. The initial contract was for 30 million Baht (approx. A\$1.5M). The contract called for a fully backed up on-course Totalisator system to interface with an infield odds indicator and with expansion capability for up to 1000 ticket issuing machines.

The system configuration consisted of:

- 1 x 3100 System
- 1 x 3300 System
- 2 x 212 CRT Displays
- 2 x 854 Disk Drives
- 1 x 405 Card Reader
- 1 x 415 Card Punch
- 1 x 512 Line Printer
- 3 x 601 Magnetic Tape Transports
- Infield Indicator Interface
- Ticket Machine Interface

In keeping with the CDA tradition of naming betting systems with acronyms the RTC system was named COLT (Computerized on Line Totalisator)

The contract was awarded to CDA after the RTC discounted proposals from IBM, Univac and Fujitsu. The former two companies were only prepared to rent at approximately 500,000 – 600,000 baht per month, which was unacceptable to RTC. The Fujitsu offering was specifically designed for horse racing and was not suitable for the general commercial data processing plans of RTC and was therefore also rejected. The RTC plan was to recover the cost of the CDA system in five years by operating the systems on a data centre basis, selling time to other users other than on Sunday race days.

In addition to the CDA contract, RTC signed a contract with Automatic Totalisator Limited Australia (ATL) for the supply and installation of 200 x J8 Ticket issuing machines and an Infield Indicator at a contract price of 12 million baht. The J8 ticket issuing machines and the Infield Indicators were to be interfaced to the CDA COLT system in a cooperative project between all parties.

Prior to the implementation of the COLT system, RTC had relied on an electromechanical Totalisator and 67 ticket issuing machines. These ticket machines were only capable of issuing up to 20 tickets per minute. The strain on this equipment had increased substantially up to the time the COLT system went live.

On average, most major cities around the world have at most a weekly race meeting. Bangkok seldom had less than two per week in 1970. Race meetings were held on Sundays at the Royal Turf Club and at the Royal Bangkok Sports Club (89 ticket machines) on Saturdays. As both racing clubs had a shortage of ticket machines it was standard practice to borrow a truckload of ATL ticket machines from each other every weekend.

A RTC annual report stated that income from the sale of betting tickets had increased from 20.5 million Baht in 1962 to almost 100 million Baht in 1968. RTC earned nearly 104 million Baht from horse racing and other club interests in 1969.

In early 1970 it became obvious that the existing outdated equipment was causing a loss of revenue to RTC. As an example it was estimated that up to 30% of punters could not place their bets before race post time. In fact it became so chaotic that just prior to post time, punters would scramble up the cyclone wire partitions and push their money through in the hope the operator would take their bet. It seemed that something in the punters psyche required them to wait until the last possible moment to place their bet. To combat this, RTC officials had to move the one minute post time warning bell from one minute to two or three in an attempt to spread the load on the operators.

The COLT system provided a more accurate and reliable service than the existing Totalisator in that the old system could only estimate the dividend it paid. The COLT system ensured that the successful punter was paid out exactly what he was entitled to. In addition the 200 new ATL J8 ticket machines could issue up to 90 tickets per minute equating to a maximum of 18000 tickets per minute against the old system maximum of 1340 per minute.



The COLT hardware was installed in a purpose built computer room behind the grandstand. New office accommodation was also built for operation and applications personnel. Approximately 15 Thai technicians and programmers were recruited and trained. Some of these RTC staff spent time in Melbourne at both the CDA St Kilda road office and the Victorian TAB.

The COLT software was built on architecture implemented at the Victorian TAB by CDA in the CARBINE system. The major part of the COLT software for RTC was developed and tested on the two RTA 3000 systems that were initially installed in the eastern computer room of CDA's 598 St Kilda Rd office.

Charter Caledonian 707 at Kuala Lumpur Airport
Christmas Morning 1970



Reboarding after
transit stop in
Kuala Lumpur
Dec 25 1970



At the end of December 1970 the COLT system was de-installed and packed for air shipment to Bangkok. We obtained a back loading charter on a Caledonian airline Boeing 707 that had bought Scottish migrants to Melbourne. On Christmas Eve, the systems and six of the project team boarded the aircraft and landed in Bangkok midday Christmas day 1970.

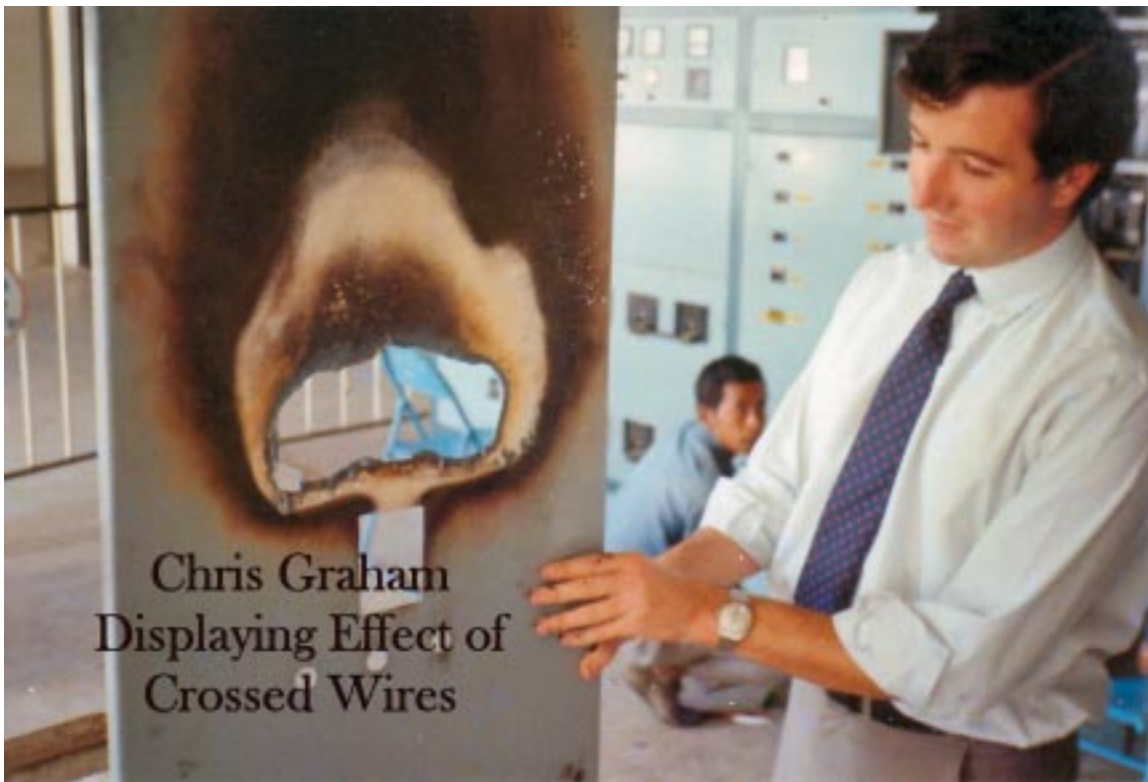
After clearing customs and immigration the project team was treated to Christmas Dinner at the Dusit Thani Hotel hosted by local Control Data staff. This was very welcome as we did not get any food on the flight (other than a snack in the Kuala Lumpur airport transit lounge) due to Qantas (the charter agent) failing to provide food (and beer) on board as promised. As we were seated in the tail end and separated from the flight crew by the computer gear and the stacked seating we could not even share the crews catering.





RTC December 27 1970

The systems were installed without incident.

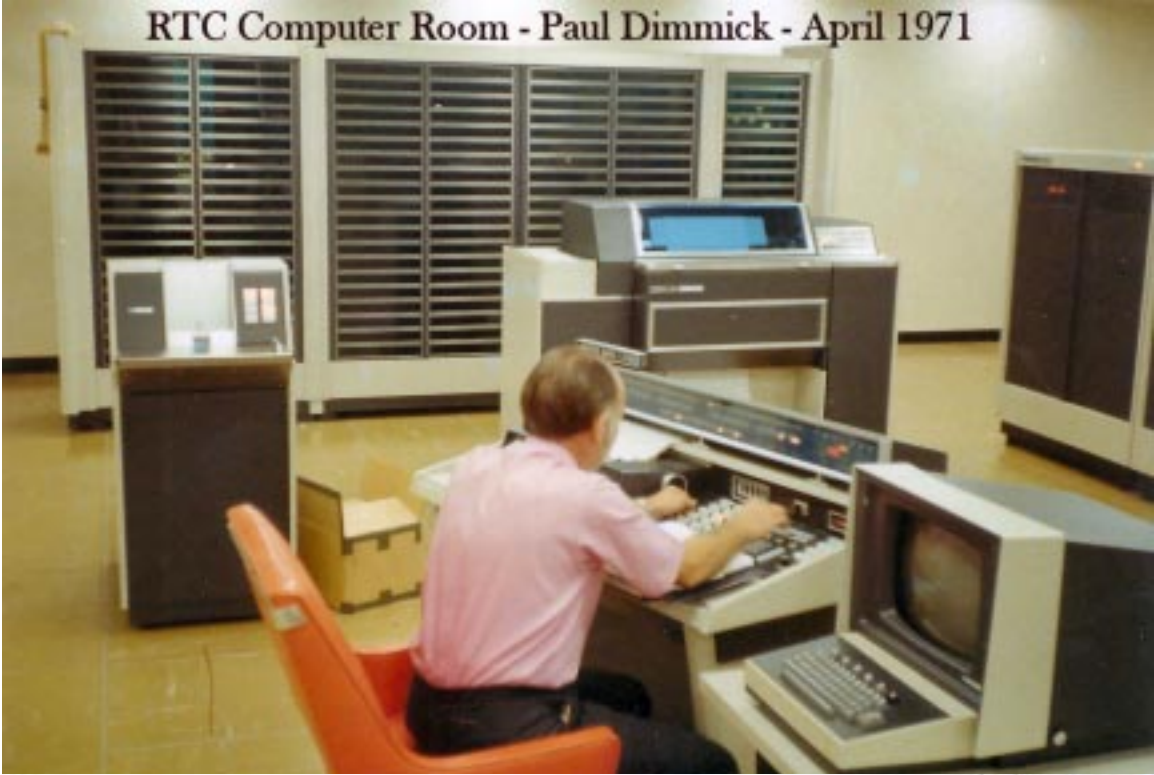


Chris Graham
Displaying Effect of
Crossed Wires

The only excitement was when one of the local electricians managed to cross over a 600amp active cable with a neutral on the emergency diesel generator. Starting up the generator and switching the circuit breaker blew a large hole in the switch cubicle. Whilst the electrician's eyes escaped damage he suffered very bad burns to his face from molten metal exploding.



RTC Computer Room - Paul Dimmick - April 1971

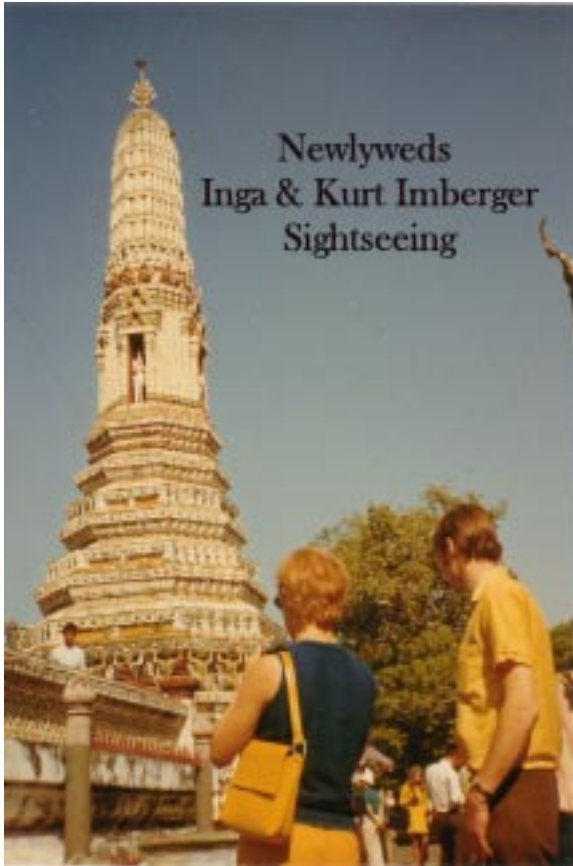


Infield Indicator and Ticket Machine Interface Racks

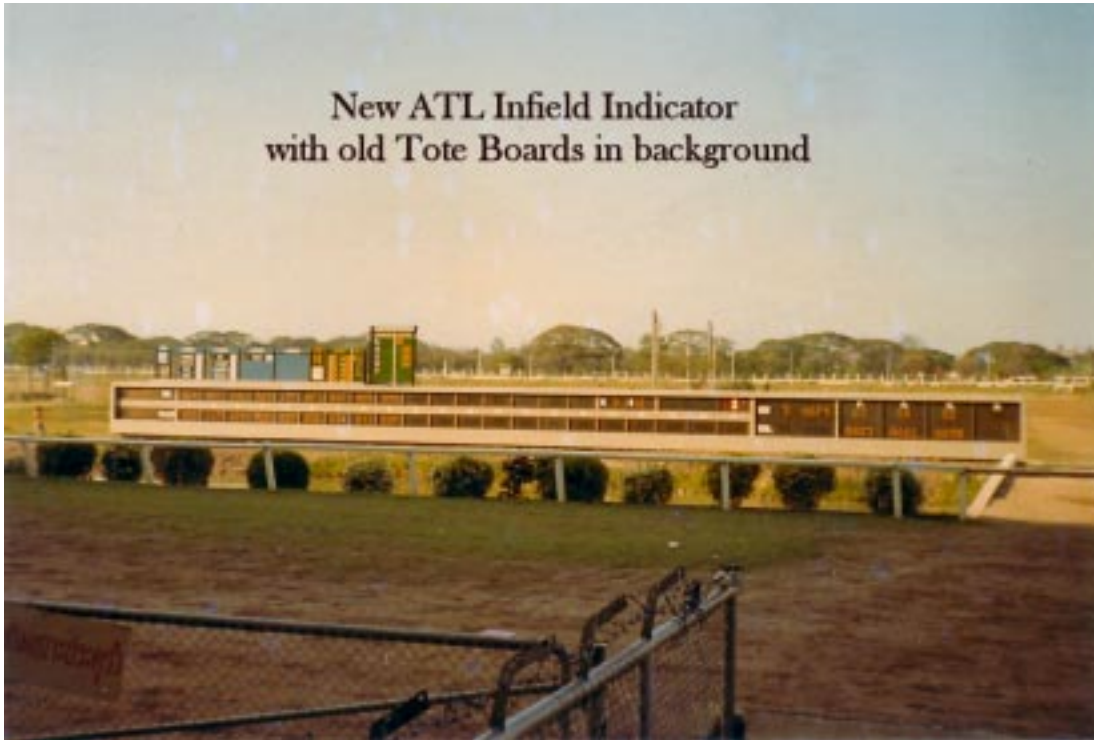




During the first three months of 1971, continuing system development and testing were done on site. Approximately 150 ticket machine operators were brought in of an evening on a regular basis to volume test ticket machines on the system in an attempt to show up any weakness or shortcoming in the software and/or hardware. Every possible bet type was entered by the operators over a period of a couple of hours.



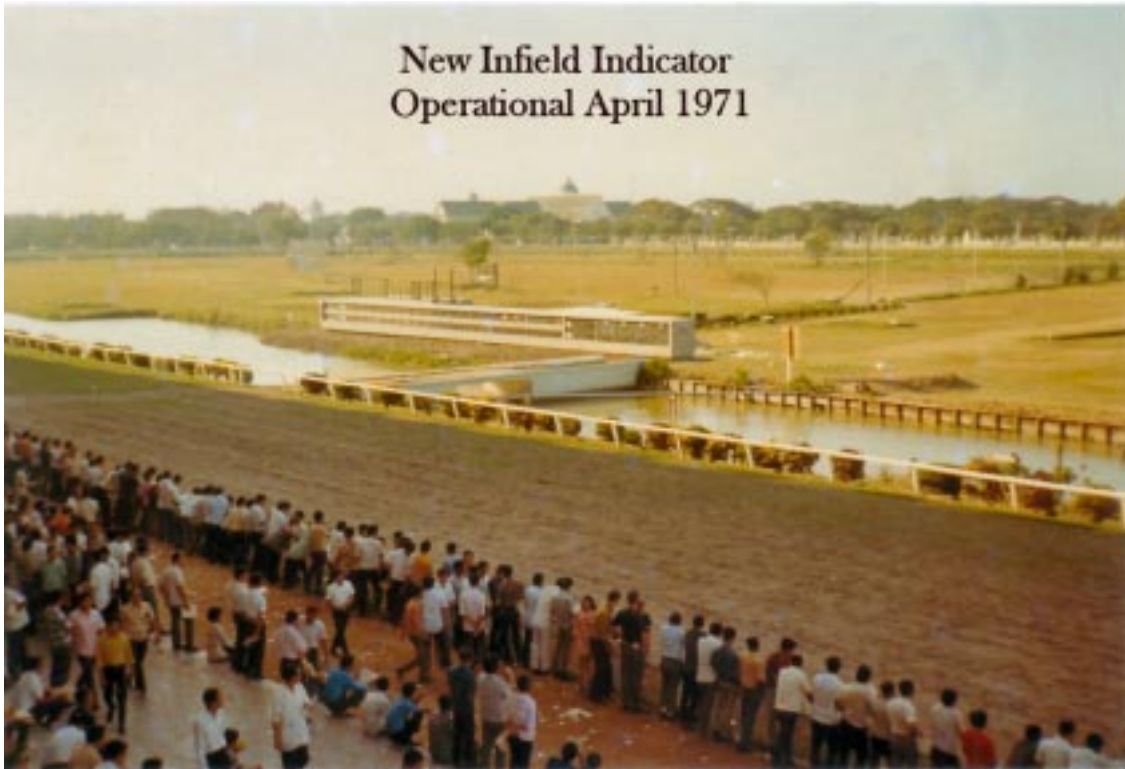
During the three months the project team worked long hours. Boonwong, one of the committee members took pity on us. He thought we needed some R & R and arranged a weekend at a new resort he was involved with at Pattya in the gulf of Siam.





On the fateful big day in April 1971 that the system was to go live the project team was confident it had tested every possible area. RTC even had a Buddhist monk come into the computer room to bless the system. Whilst I had no issues with the monk hanging garlands on the ends of the mainframes I took exception when he started spraying holy water around.





On the very first race there were only three runners, which was most unusual. This meant that there should only be forecast odds for three runners that would show on the Infield Indicator. Not so, a non-existent combination showing odds of 999 to 1 appeared. To my horror I realized we had a problem. If that was not enough the odds started to decrease indicating punters were placing money on the non-existent forecast bet combination because the odds were so attractive.

I was sitting in the official area with club and government officials including the King of Thailand. I approached Somchai the club secretary who appeared not to have noticed what was happening.

I suggested he make an announcement over the PA to stop people betting on something that could not pay out whatever happened. His response was to wait and see if anyone complained which horrified me. Rather than wait to see if there was going to be a riot if the punters realized what was happening I ran down the grandstand jumped over the outside rails across the track, over the inside rail, across the canal bridge and into the blockhouse that housed the Infield Indicator. Once in the bunker I pulled the connecting plugs out of the offending odds indicator. Strangely no one in the very large crowd that day seemed to notice what had happened even though the grandstand crowd had seen this tall "foreign devil" run across the track whilst the first race was being run. No one ever did complain even though large amounts of money had been wagered on a non-existent forecast combination. Because of this the club decided not to offer to refunds as any announcement would have opened a Pandora's Box

After the first race was over the offending infield indicator was reactivated and the system ran for the rest of the meeting without a hitch. The day finished well with all in the official guest area drinking champagne from the King's very large gold cup.

Monday morning the software bug was fixed and soon after RTC signed the acceptance. We were lucky as a A\$10,000 penalty was in the contract for any major malfunction in the first 12 months. The system operated without a major fault for twelve months and we retained the contingency A\$10,000 that had been budgeted for in the project costs.

Following system acceptance we arranged a party to celebrate on the Chao Paya river. With about 30 odd people on board a chartered boat containing just about every one that had been involved with the project we took off early evening with lots of food, bottles of whisky and of course cases of Singh beer. Later in the night when every one was quite mellow and it was very dark, Bob Hammond was swinging on a brass handle to get around the boats "bridge". Unfortunately Bob's weight was too much for the holding screws and Bob and the handle went overboard. We had a serious problem as it was pitch black with no moon and it was taking minutes to communicate with the crew that we had lost a passenger. Bob's wife, Ting Lee had seen Bob go overboard and became hysterical. To add to the confusion an ocean going cargo ship was making way up the river towards us.

After getting the boat turned around, someone found a torch and we eventually located Bob. Believe it or not Bob still had his bottle of Singh beer in his hand when we fished him out of the river. Bob ended up in hospital with some serious infection picked up from the river but recovered quickly and was back on the job a week later.

At the time the project team returned to Australia the systems were being used for variety of applications in addition to wagering on Sundays. This included a United Nations sponsored Mekong Delta project. Eleven Universities were also to benefit from plans of free use of the systems under the management of the National Institute of Development Administration for 3 hours per day 5 days per week. This was a generous gesture from the RTC whilst under Royal Patronage was still a private organization.

The COLT Project team:

Control Data Australia:

Ron Bird - Project Manager
Kurt Imberger - Systems Programming Team Leader
Chris Graham - Programmer
Malcolm Richardson - System Engineer

ATL Australia:

Peter Rolls - Project Manager

Control Data Thailand:

Vilas Ansanunta Engineer
Bob Hammond Engineer
Paul Dimmick Engineer