The whistle’s blowing

By Gary Dembon

A n eye in the sky has spied the way for the Northern Territory’s long dreamed of southern rail link.

For more than a century Territorians have talked of building a railway down the heart of the continent, from Darwin through the rugged ranges, swamps, blistering desert, spinifex and endless scrub to Adelaide.

There have been several false starts, but in 1970 a decision was made to complete the link from Adelaide to Alice Springs.

This time the plan bore fruit, and by last year a 24-hour passenger and freight service was operating between the two centres.

Meanwhile the Territory Government, never one to miss an opportunity, was chasing the slim chance of continuing the line north.

It hoped to persuade the Federal Government that a north-south railway would be an invaluable stimulant to the Territory’s growth and economic development and a benefit to defence and tourism.

Arguments from the north were forceful, and gradually the Territory’s pie in the sky railway came down to earth. A joint study team was set up between the two governments.

The first task was to identify a general route for the railway.

A century ago engineers trekked overland, found the highest ground and laid the track. Nowadays the routine is somewhat different with the accent on efficiency and longevity.

As far as possible the track must service existing industry and population centres. At the same time it must be speedy and safe.

It must have as few curves as possible to reduce maintenance and minimise freight and passenger delivery time, and it must be highly unlikely to disappear down a sink hole, off the side of a crumbling rock face or beneath a deluge of flood water.

And this is where space age technology steps in.

The attempt 100 years ago to build the railway south from Darwin ended at Pine Creek. This was one of the last engines on the line.

Opposite page: Satellite picture of the route — from 900 km above the earth.

Orbiting 900 km above the earth is a satellite called Landsat. It has been instrumental in plotting the railway corridor from Alice Springs to Darwin.

It has provided instant geological information that would have taken months to prepare by conventional methods.
Digital tape recordings were bought from the Australian Landsat Station and processed by CSIRO computers in Canberra. The resulting images cover the entire area in 10 images, each 185 km² on a scale of 1:250 000.

The images reflect signals received by the satellite from different types of soil, rock and vegetation. By translating the colours, Territory geologists were able to describe a 5-12 km wide corridor into which the track could be slotted.

Australian National Railways engineers have used Landsat's pictures for their own studies, as many conventional maps are of little use.

Once the basic corridor was identified the boffins took to the air, photo-mapping and checking out the route visually. After that the real work began.

Before anything can be done at ground level anthropological investigations must be made. Aboriginal representatives must be consulted and sacred sites identified.

Then it's out with the four-wheel-drives and bush walking boots to detail centimetre by centimetre where the track will go — every hill, every tree, every creek, every swamp must be examined. Water and construction material must be found at regular intervals along the 1500 km route.

There must be a detailed study of the railway's environmental, social and economic impact.

What will be its effect on the land, the flora and fauna? How will it affect pastoral properties, mining, urban centres, historic sites, parks and reserves?

All this before a single sleeper is laid.

So far the track's course between Alice Springs and Tennant Creek and between Katherine and Darwin has been fixed. By the end of this year Alice to Tennant will have been pegged and the whole route should have been made public.

From Alice it runs virtually in a straight line to Tennant. From Tennant to Katherine experts are choosing between two alignments, one east and one west of Lake Woods, west of the Stuart Highway.

The existing route through Pine Creek will be utilised from Katherine to Adelaide River, and from there to Darwin is still a thumb-sucking subject.

It seems likely, however, that the track will follow the western side of the highway and be about 10 km shorter than its predecessor.

In Darwin itself the line will be positioned to avoid roads and built-up areas. It is likely to run behind Winnellie and around Frances Bay.

The big question remaining is when the transcontinental railway will be finished.

In August's Federal Budget $3 million was designated for planning and route allocation. Construction should start in 1984 and Prime Minister Malcolm Fraser has promised that the $420 million project will be finished by 1990.

But the Territory Government is pressing for 1988. It wants the first train to run in celebration of Australia's Bicentennial.

As the Transport and Works Minister, Mr Nick Donkis, says: "The Territory is developing at a far greater rate than the rest of Australia."

"Its importance to defence and tourism are finally being recognised. It is rapidly expanding Australian trade links with South-East Asia, and a railway land bridge to the south could cut between one and two weeks off freight times to places like Singapore."

"The railway is a key factor in enhancing the Territory's viability and supporting Australia's national development."

"The Territory still suffers from high freight costs, vulnerability of supply and the burden of isolation."

"Australia's prospects cannot be realised to their maximum while vast areas of the north remain isolated. Therefore a railway by 1988 would be a very happy birthday present indeed."