

PARRY NEWS



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An Occasional Newsletter from JPM Parry & Associates Ltd (JPA),
Parry People Movers Ltd (PPM), Pre Metro Operations Ltd (PMO) & Holdfast Carpet Track Ltd (HCT)

November 2005

PPM 50 RAILCAR GAINS PASSENGER SERVICE APPROVAL AND MOVES TO STOURBRIDGE TOWN BRANCH



The PPM railcar passes in front of Stourbridge Junction signal box on 6th November 2005 en route to the Town branch (far left)

PPM 50 LIGHT RAILCAR No. 999 900 has attained approval from Network Rail and HM Railway Inspectorate for service on the Stourbridge Town branch. On 9th November, the national network owner issued a Certificate of Authority for Interim Operation to licensed train operating company Pre Metro Operations Ltd, following the earlier approval of a derogation from Railway Group Standards and the issue of the railcar's engineering acceptance certification,

both in October. Approval of the operator's safety case is coming from HMRI. As reported in Parry News 42, Network Rail's contribution to the complex approvals process has been crucial, with the national infrastructure owner itself seeking the key derogation from the Rail Safety & Standards Board. Vehicle acceptance body CORREL Rail Ltd undertook scrutiny of the railcar and its maintenance arrangements before

issuing engineering certificates. The vehicle was moved to Stourbridge on 3rd November and gauging trials were completed three days later. Signal staff and two train operators provided vital assistance: Chiltern Railways allowed use of their local depot and Central Trains provided a conductor to guide the PPM railcar over the main line tracks between the depot and the branch. *A molehill on top of a mountain, page 4*
Case for Wensleydale connection, page 5

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MINISTERIAL VISIT TO CRADLEY HEATH

ON 22nd SEPTEMBER Gareth Thomas MP, Parliamentary Under Secretary of State at the Department for International Development, and local MP Sylvia Heal visited Parry Associates' Cradley Heath site to look at the company's work. As well as viewing the construction-work of the prototype HIGH AND DRY house (see Parry News 42), Mr Thomas and Mrs Heal saw the solar-powered 5-metre lamp post (see Parry News 41), the rubble crushing machine featured on page 8, and multi-purpose equipment for producing roofing tiles and other precast items. *Somalia to pioneer HIGH AND DRY lightweight construction, page 6*

Right to left: Gareth Thomas MP, Abou Manneh, Sylvia Heal MP, Robin Parker and John Parry at Cradley Heath (photo courtesy of Halesowen News)

YOU'D HAVE A LONG FACE TOO IF ALL YOUR TREES WERE GONE!

Comment
By John Parry



SO IT'S NEW technology which is the best means to combat climate change after all! And there we were expecting that some huge negotiation involving international trading in the rights to produce carbon dioxide between large and small polluters would, by magic, put everything right. That was economic extrapolation at its most naïve – the assumption that pursuit of profit by entrepreneurs means that once an 'advantage' appears, they will immediately recognise it and put it into use. Remember, decades passed following the

construction of the clearly superior Iron Bridge in Shropshire before any more were built. The foundryman who committed his company to make the bridge components, Abraham Darby, was long dead by the time the technology was taken up by the market.

So how do you speed good developments along the way?

Word is just out that new personal rapid transit technology from UK pioneers Advanced Transport Systems - having been given valuable help by NESTA (the National Lottery-funded organisation which supports science, technology and the arts) - is now being massively boosted by BAA. The airport owner has decided not only to invest in the new company, but to implement a pilot scheme at Heathrow Airport. This is excellent news and an important bell-wether for PPM. ATS has directed its efforts to a different layer in the transport market that is now occupied by diesel taxis and minicabs and its well-deserved breakthrough, after years of struggle similar to the PPM experience, responds to the environmental case for substituting 'clean' for 'dirty'; guided for driver-steered; innovative for 'tried and trusted'.

It is now time for one or more of the powerful organisations which direct the rail and tram market to step into technology provision for intermediate-sized public transport vehicles. The Lottery, meanwhile, is already well known by the railway industry - but in the 'heritage' sector. There are many historic signal boxes, turntables, passenger coaches and steam locomotives whose preservation owes much to lottery funding. But surely the outcome of the support to ATS shows that railway nostalgia and historic artifice will not always prevail over support for forward-looking endeavours in rail innovation. The future. A past parallel once occurred on Easter Island in the Pacific. The people starved after devoting too much effort to symbolic cultural activities and overlooked the need to plant trees, so wood ceased to be available for things like fishing boats. Building gloomy looking statues looking out to sea has certain parallels with setting up a national lottery and spending much of its proceeds enhancing 'heritage', celebrating closed-down factories and obsolete transport equipment. More support for technical innovation which might lead to significant economic and environmental benefit is the equivalent of the Easter Islanders planting more trees and carving fewer stone heads. Readers of this series of newsletters will recall that in 2003 NESTA declined to provide any support to the PPM venture, not because of any criticism of the technology or lack of credible market opportunity, but because of concern of already being 'too exposed' to investments in innovative transport. Perhaps it's time to think again now that the one ugly duckling has turned into such a valuable swan. Well directed pump-priming can be used to give an innovative product the gloss and exposure which then gets the attention of the big players who have the power to make things actually happen, fast.

So if technology holds the best answer, it's time for action not advocacy, the future not the past.



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AUTOMATED GUIDED TAXI VENTURE ACHIEVES BREAKTHROUGH

WHILE PPM'S VEHICLE design has been responding to feedback from public transport authorities, a different approach has been taken by another innovative British company: Advanced Transport Systems (ATS), founded by Martin Lowson, a former engineering professor from Bristol. Martin's 'ULtra' concept is aimed at the taxi market and is one of several PRT (personal rapid transit) systems under development. News broke in October that airport owner

BAA is taking a one-quarter equity stake in ATS, putting £7.5 million into the company which will permit the development of a PRT system for London's Heathrow Airport.

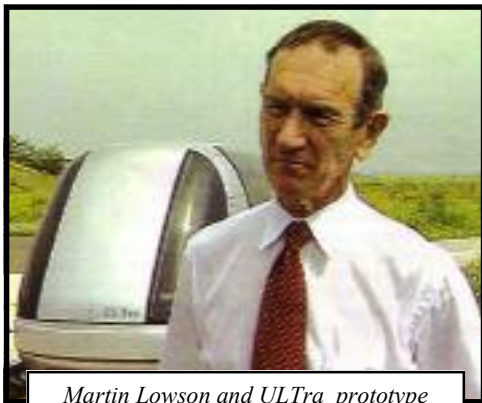
This model of a large customer investing in innovation that will help its own business is one that could be replicated elsewhere, such as on

the railways where forward-thinking independent lines could provide a new approach for parts of the national network.

Accordingly PPM and its associates have opened several high level dialogues with senior figures in the UK transport industry. The aim is to develop the argument that it makes no sense to embark on rationalising and modernising the railways with programmes such as

the Community Railway initiative if bodies such as Network Rail have no funding available for tactical investments to make it happen.

However, the experience with the Stourbridge endeavour is that – with the best will in the world – the ownership, operating, regulating and safety structures are so complex that nothing can be implemented quickly on the national network. This means that robust experience gained from carrying



Martin Lowson and ULtra prototype (Photo courtesy of Local Transport Today)

out actual experimental projects is not available because the experiments themselves take so long to set up. Reverting instead to consultants' feasibility studies as a basis for deciding the future is an invitation to fall back on 'tried and trusted' solutions

because, without tangible evidence to lean on, the consultants and their clients will always prefer to take the more familiar, non-innovative path.

On the railways, the time is ripe for the equivalent of BAA to step in with a few big decisions, but to achieve rapid delivery of experimental results it will be necessary to enlist the help of independent lines such as the Wensleydale Railway (see page 5).

MOBILISING 'STUCK' TILE PLANTS IN SIERRA LEONE

JPA agent meets Commonwealth DSG to propose strategy

DURING THE WEEK ending 12th November, Commonwealth Deputy Secretary General Winston Cox made time to meet JPA's Sierra Leone agent Senesi Fawundu. Discussions concerned the Commonwealth's Resource Based Building Materials programme of 2002-03, when the Commonwealth supported the Sierra Leone government in training hundreds of former civil war combatants in manufacture and use of Parry roofing tiles. Commonwealth finance provided several production plants for building materials enterprises employing the new workers. It was planned to distribute these throughout the country.

Senesi had contacted JPA earlier expressing concerns on an issue that was preventing the elements of the plan from coming together. After the war, the authorities decided to boost the standing of traditional chiefs, who were a source of stability. They decided therefore that distribution of building materials production plants should be to the chiefs, which was taken as a sign of status. But two aspects were apparently discounted: building in marketing functions to engage contractors and material specifiers, and making a bigger effort to bring trained ex-combatants to facilities set up on a commercial basis.

Senesi's plan (outlined to Mr Cox) included aligning current plans for mass affordable housing with the strategic location of production facilities, and expanding his own facilities in Bo – already used for training, demonstrating and marketing the production and use of roofing materials. JPA advised the Commonwealth Secretariat of the matter ahead of Mr Cox's visit, and he is understood to have taken full note of Senesi's concerns and ideas. He has undertaken to consult his ComSec colleagues on his return to London to consider the case for further intervention.

ROS COLWILL RETURNS TO NIGERIA AFTER NEAR-FATAL ILLNESS

NO SINGLE VENTURE lifted the spirits of Parry Associates and its supporters in the 1980s more than the decision by the Methodist Church of Nigeria to transform the lives of the leprosy sufferers of Uzuakoli in Eastern Nigeria. The person behind the initiative, not herself a Methodist but a young Catholic volunteer, Ros Colwill, helped the local church formulate an astonishing vision for people who almost wholly depended on charity. Many were handicapped and disfigured, relying on begging on the streets of Port Harcourt for their livelihoods. Uzuakoli provided a refuge from harsh treatment



Ros Colwill with JPA Chairman John Parry (Photo Barbara Parry)

by the surrounding community.

The central area of the Uzuakoli settlement was turned into a roofing tile factory and the former beggars became tile-makers. Such was the success of the venture that customers began to come from many parts of Imo State to buy the products.

And tile production continues to this day.

Ros meanwhile moved on to help fund and later upgrade a second settlement, this time for mentally handicapped people – another group frequently thrust aside in a competitive Nigerian society. Two years ago Ros, who being devoted to others never



Uzuakoli tilemaker in 1985

looked after herself, fell ill but continued working until her colleagues insisted she return to Britain for treatment.

However, this was not in time to prevent a massive disabling stroke, which took away her ability to move independently and her sight, though thankfully not permanently. Ros's illness did not diminish her strong will and over recent months she has recovered sufficiently to have decided to return to 'her people' in Uzuakoli and continue her work.

On 8th October, just before her departure, she asked John Parry to come and discuss how she could build a new house using the materials produced at the leprosy centre factory, with special access arrangements to help her cope with the walking difficulties left over from the stroke. Plans are now afoot and with Ros back in Nigeria we hear that the local people have decided to care for her with all of the energy she devoted to caring for them.

FIVE YEARS' OPERATION IN BRISTOL & CHASEWATER INDICATE UNTAPPED EXPORT MARKET POTENTIAL

PPM's Stourbridge showcase will be vital shop window for British transport innovation

WHEN PPM OPERATIONS begin at Stourbridge the service will provide a demonstration of innovative transport technology and Community Light Rail. Operating in passenger service, with support from Centro (the West Midlands Passenger Transport Executive) and the Department for Transport, PPM technology will be seen as a new option for transport planners to consider.

However, PPM systems have already been demonstrated to tens of thousands of passengers and a large number of influential visitors. The Bristol Electric Railbus operation carried over 50,000 people between 1998 and 2000 using a PPM 35 vehicle with an emission-free,



His Worship the Mayor of Stellenbosch (South Africa) on board the PPM 50 Light Railcar at Chasewater on 8th July 2005

intermittent electric power system. Visitors making trips to the UK especially to see the railbus included planners and engineers from Japan, China and several European countries. The Bristol railbus now has a new home at Wirksworth on the Ecclesbourne Valley Railway. The PPM 50 railcar itself spent nearly two years at the Chasewater Railway in Staffordshire before moving to Wensleydale in August 2005 and finally on to Stourbridge on 3rd November. With its convenient proximity to the company's base at Cradley Heath, the Chasewater Railway proved an ideal location for demonstrating the potential of PPM technology. A string of visitors saw and rode on the railcar during this time, including representatives of UK local and central government. Many international visitors – from South Africa, Australia, Malaysia, Argentina – also benefited from demonstrations. Journalists took up the chance to report on a new approach for both rural and urban public transport.

The Lord Mayor of Birmingham handed over a commemorative plaque which was installed inside the vehicle, and the Mayor of Stellenbosch in South Africa considered that a PPM system could allow a disused railway to be re-opened for both commuter and tourist use. The Stourbridge operation will enable the export potential for PPM to be realised. This 'shop window' will mean that foreign visitors will see for themselves the technology in normal conditions, giving much greater confidence in decisions towards major investment. The PPM development was originally conceived as a robust form of transport for the burgeoning cities of Africa, Asia and Latin America. It was always inevitable that customers would first require proof that the technology works. Operation at Stourbridge will provide that assurance.



PPM 35 'Car 10' owned by Bristol Electric Railbus, now at Wirksworth

JOINING FORCES FOR OSWESTRY RAIL LINK

Return of passenger services planned for mothballed line

THE SHROPSHIRE TOWN of Oswestry is at the end of a railway seen by many as one of the biggest anomalies in Britain's transport system. Technically still part of the operational railway owned by Network Rail, the line from Gobowen lies unused. Yet Gobowen station itself is on the main Shrewsbury-Chester route. There is a clear argument for reopening the line for passenger services to give the busy market town of Oswestry easy access to local and long-distance destinations. However, this prospect has been hindered recently by the presence of two railway interest groups: the Cambrian Railways Trust and the Cambrian Railways Society. Since late 2003, PPM has been working with the Society who have operated a PPM 30 District Tram for over a year on their short demonstration siding track, but the Trust is also an important partner in any future development and both need to co-operate to move forward.

A real rail alternative

The PPM 30 operation at Oswestry meanwhile continues on a low-key basis and according to a recent note from Bill Turnbull, one of the driving team, 'has been and still is running well ... and is very popular with the locals and visitors alike'. The Society and the Parry organisations cannot wait until the day when longer runs out towards Gobowen and the south west edge of Oswestry are permitted on the presently mothballed Network Rail infrastructure, providing a real rail alternative for passenger transport.

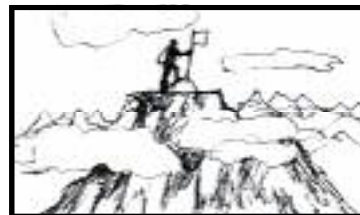
NEW PPM-BASED SERVICES ON THE RAIL NETWORK: A MOLEHILL ON TOP OF A MOUNTAIN?

OVER 700 JOURNEYS were made in eight days of PPM operation on the Wensleydale Railway, while progress on the Stourbridge approvals has been racing ahead.

As the implications of these double achievements sink in, it is inevitable that the Parry technical and planning team should dust off ideas for schemes that have sat on the shelf all too long.

PPM's most ambitious proposals (issued up to a decade ago) sported the title 'Towns That Lost Their Railways – but not necessarily forever'. At the time this proposal raised more eyebrows than interest. The issues linking transport with the environment were being voiced by just a few commentators outside the mainstream of public debate, but not any more.

If we don't say it, someone else will: the Wensleydale excursion and the Stourbridge Sunday service establish important precedents, but as passenger operations are



'molehills' of achievement when set against the broader context. Nevertheless a 'mountain' of opportunity will be revealed by a

successful outcome. Hundreds of small capillaries – rail corridors, some with their lines in fully serviceable condition – can be looked at for provision of public services once a more affordable form of rail transport is proved to be both practicable and popular. At last a significant means arises for reducing the pressure on Britain's crowded roads.

STRENGTHENING CASE FOR WENSLEYDALE CONNECTION

Map showing the railway junctions at Northallerton. The East Coast main line runs north-south, calling at the station, and the Wensleydale Railway joins from the west – but only pointing north. The 'missing link' southern chord once ran into the station and the map still shows the former alignment



The disused Northallerton embankment (marked) with the existing Wensleydale Railway tracks in the foreground



DEMONSTRATION SERVICES between Leeming Bar and Northallerton on the Wensleydale Railway from 15th to 23rd September showed how the WR can thrive by attracting local passengers. Firstly, a larger railcar is needed: the PPM 50 type is not sufficient for future passenger flows on the line. PPM has launched the Wensleydale Community Railcar Syndicate to raise funds for the first such vehicle. Secondly, a short 500m chord of track must be reinstated to connect the WR to Northallerton main line station, instead of terminating in a field within sight of the town. In September, a bus link from a specially-built platform at Springwell Lane to the station and town centre was used, but completing the missing link will provide the essential direct connection for rail users. The Wensleydale Railway provides a valuable strategic link: freight trains keep hundreds of heavy lorries off the UK's roads every year. However, the freight traffic does not provide viable revenue – causing the railway hardship

in its attempts to maintain and improve its route into the Dales. The WR will also be a valuable asset for the UK's passenger transport by providing practical experience for other 'community railways'. This has brought about new efforts to find savings for the national rail network using the WR. Key individuals from Network Rail, the Department for Transport and HM Treasury are actively considering what lessons the national system can learn from quickly-implemented experiments in Yorkshire. Crucially, rebuilding the connection to the main line station forms part of the plan. A connected Wensleydale Railway, with PPM Community Railcars running from a convenient interchange with inter-city and trans-Pennine trains, will be a shining example of how to operate local and rural railways that are attractive, affordable and acceptable. It will show how threatened lines, currently needing high levels of subsidy, can be financially turned around – and will provide a new option for re-opening closed railways.

HUGE MEDIA RESPONSE TO DEMONSTRATION SERVICES

PRINT AND BROADCAST MEDIA and rail industry journalists descended on the Wensleydale Railway during September to report on the PPM service between Northallerton and Leeming Bar. A press launch day held on 12th September – shortly before the start of the public demonstration service – attracted representatives of the local, regional and national media, while several publications sent reporters to North Yorkshire to file stories after the passenger operation had begun. Perhaps the most unusual media coverage was a spot on BBC Radio 4's Farming Today programme – but of course the subject was rural railways.



Clockwise from top left:
 - Northern Echo, 22nd September
 - Yorkshire Post, 9th September
 - Transport Times, 23rd September
 - Heritage Railway, October
 - Darlington & Stockton Times, 16th September
 - The Guardian, 12th September
 - Local Transport Today, 13th October

SOMALI CUSTOMER TO PIONEER 'HIGH AND DRY' CONSTRUCTION



Precast coffer unit

A SOMALI BUSINESS with UK- and German-based directors approached Parry Associates in May to discuss brickmaking machinery for its home country. After lengthy discussions and seeing a sample 'HIGH AND DRY' two-storey

affordable house (see Parry News 42) at JPA's Cradley Heath site, the directors asked for prices for a 4.8m x 4.8m version of this new design as well as a starter plant to produce semisheet roof tiles, along with hollow block moulds, water tank moulds, and moulds for producing paving slabs, screen blocks (windows) and coffer units forming a lighter form of floor.



THE PARRY SYSTEM:
Coffer underside of upper floor installed without need of timber shuttering and reducing the quantity of concrete by half

The Somali customers showed interest in another new design – a rubble crusher capable of breaking down granite, concrete and burnt brick. This innovation (described in *Technical News* on page 8) has been identified as potentially useful in Africa as well as



CONVENTIONAL SYSTEM:
The large area of shuttering used to support a floor of reinforced concrete while it sets consumes copious amounts of timber

south east Asia and the Indian subcontinent. Following receipt of our indicative quotations for the first two plants an agreement was reached and a deposit made which enabled work to start on this equipment, the balance being due when the order is packed and ready for despatch. The goods will initially be transported to Germany for onward shipment to Somalia. There is a severe shortage of wood in the country, so the Parry raised floor technology, which eliminates the timber shuttering normally needed to support setting concrete, is very appropriate. HIGH AND DRY construction also saves half the concrete needed to form the floor structure: an important further advantage.



Déjà vu in Vanuatu: 21 years earlier a small-scale demonstration of the roofing tile was set up for the system and its alternatives to be evaluated by CID Brussels. One of the workers is pictured holding up a sample tile. The project was not taken further at the time

DIPLOMATIC MISSIONS COLLABORATE TO BRING TILES TO SOUTH PACIFIC

Initial project on Vaté Island to expand later to other locations

THE ISLANDS OF Vanuatu are far away from Britain but still have a role for Parry roofing technology. Situated at about the mid-point between Fiji, the Solomon Islands and New Caledonia, Vanuatu has ten larger populated islands and numerous smaller islets and atolls. It has been difficult for the Vanuatu government to create non-traditional livelihoods because of awkward geography and lack of natural resources. However, the production of building materials can be dispersed over multiple localities if the technology is based on small production units as typified by Parry technology.

After lengthy investigation, the NGO Habitat for Humanity decided earlier this year to embark on a tile making project at Port Vila on Vaté Island. The initiative quickly gained the support of the British and then the New Zealand High Commissions, both of which provided finance to pay for roof tile production equipment. News then came through that the German Embassy was also prepared to finance a consignment, which may provide the opportunity to spread production to one of the other islands.

With three diplomatic missions giving support, JPA decided that the endeavour should be backed by provision of technical support. The company therefore sought funding to send technical associate Malcolm Alcock to Vanuatu at the start of November. His air fare has been met by Build IT International, a newly-formed NGO (see opposite page) committed to support the dissemination of intermediate technology building systems.

SEVEN MINI-HOUSES IN ONE BOX!

Consortium devises 'instant' accommodation for peacekeepers & NGOs

IN OCTOBER, the United Nations headquarters in New York issued a notice of its intention to procure up to 2,500 small prefabricated housing units for the UN peacekeeping personnel in a post-conflict situation in Africa. These were needed to be delivered by the end of January 2006. Parry technology frequently comprises the ability to put existing designs to new uses, and this was no exception. Across the road from JPA's Cradley Heath base lies the headquarters of Black Country Caravans – a company which has particular experience in the design and use of lightweight composite panels with integral doors, windows and service connections as will be required for the housing units for the peacekeeping troops. The second part of the approach is building relationships with supply chain companies

enabling rapid response to customer requirements. Within a few days, a three-way grouping of Parry Associates, Black Country Caravans and AJC Trailers – specialist vehicle bodywork builders – was at work looking at ways to respond to the UN's call to tender. The new collaborating partners see the prospect for supplying fitted out, air-conditioned accommodation units designed to be supplied in flat-pack format, with kits for seven units fitted into a single standard 20-foot container. The main challenge, however, does not lie in the design and manufacture (which can be achieved very rapidly) but in the logistics. Such is the time delay in consigning the containers by sea, unloading and clearing at the port and then delivering them over a thousand miles overland to the locality concerned that the

timescale cannot on this occasion be met. However, the design and costing exercise has continued and will result in a prototype house being constructed and a specification issued to promote the concept for other applications likely to arise around the world.



Seven 5m x 3m housing units supplied as 'flat pack' kits in one standard container

NARROW-GAUGE MINERAL RAILWAYS PROMISE BIG FUEL SAVINGS

Clayton and Parry Associates assess Borneo application

IN OCTOBER 2005 Parry Associates was approached by the technical consultants to an Australian mining enterprise which has opencast operations - mainly copper, salt and coal - in their home territory as well as in South East Asia. The situation being investigated was in Kalimantan, the Indonesian part of the island of Borneo, where a coal deposit is being worked intensively at times of rising world fuel oil costs. Ironically, one of the problems with the operation was the multi-million dollar annual diesel fuel bill associated with dumper truck haulage along dirt roads. While some in the company favoured a massive conveyor system, the group felt that the alternative of a mineral railway should be looked at because of the potential for lower capital investment. Accordingly, JPA got in touch with their

technical associates Clayton Equipment, which is now owned by two previous employees of Rolls-Royce (the former parent company). Chief Executive Steve Gretton decided to visit the mining operation later in the month to assess whether - in place of 40 thirty-tonne trucks - the task could be performed with locomotive-hauled trains running on 18km of narrow gauge railway. As expected, the estimated fuel savings together with reduced costs of maintenance and truck drivers' wages showed a rapid payback on capital investment and a very much reduced environmental impact on the locality. There are many such haulage operations throughout the world where a return to rail is looking increasingly attractive.

Farm and mineral railway technology, page 8



Forty fuel-hungry dumper trucks are used in the existing mining operation
(Photo Steve Gretton)

BUILD IT INTERNATIONAL NEEDS YOU!

BUILD IT INTERNATIONAL is now in business! This new charity, inspired by John Parry, has supported its first project in Vanuatu (see story on page 6). Technical assistance is being provided to the international organisation Habitat for Humanity to help set up two tile making workshops using Parry equipment. The aim is to improve the quality of local housing in this poor Pacific island group.

The launch of Build IT was noted in this newsletter earlier this year (see Parry News 42). The charity has since registered as a company limited by guarantee and is now registering with the Charity Commissioners. Founding trustees are Andrew Jowett, Sue Lucas, Peter Caldwell and Ross Cranston. The vision is to promote the use of 'intermediate' or appropriate technology to meet the everyday needs of the world's ONE BILLION poor.

The initial focus is on building materials - low-cost housing and other community facilities using high quality, locally produced building materials. We also intend to look at supporting efforts to spread fuel efficient stoves and solar power - to reduce the use

of firewood and charcoal. But there will be many more opportunities to get involved in other practical solutions that can improve the quality of life of the world's poor. Sustainability is critical and we intend to help local entrepreneurs make a living and create employment through the initiatives we support. We will work through competent organisations with a presence on the ground such as Habitat. We have already approved a school building project in war-torn Liberia and now need to raise £9,000 to make this happen. We are also looking at possible projects in Sri Lanka. If you are interested in practical solutions to poverty and want to find out more about our work or make a donation to help us get established, please send an email to Andrew Jowett at: info@builditinternational.org Parry News will continue to cover the progress of Build IT as it moves from a great idea to practical action. But it's great to take those first steps - with your support who knows what might happen?

Andrew Jowett
Chair
Build IT International

INTERNATIONAL NEWS IN BRIEF

ACEH (Indonesia)

JPA's Malaysian associate Tony Barry will be based in Aceh from November working with the United Nations Development Programme on post-tsunami reconstruction.

NIGERIA

Bola van der Kreuf Bankole, who currently lives in Holland and is the daughter of a long-established customer, has visited the JPA works and placed an order for a small plant with which she hopes to start a building materials business in Nigeria's border region.

SUDAN

Billy Smyth of the Episcopal Church of Sudan has received his plant in Yei in Southern Sudan and should now have commissioned it and started production.



This is the first of four plants sent to the region and news is expected on the others as and when they reach the same stage.

TRINIDAD AND TOBAGO

Randy Jeffers, an old customer based in Port of Spain, has confirmed his interest in purchasing two semisheet roof tile plants with moulds to make 1000 tiles a week.

UGANDA

Turn-Key Construction, based in Kampala, have taken possession of a consignment of riven slab moulds and a specially made kerb mould (the latter manufactured at the JPA works in Cradley Heath). They plan to make this a new part of their existing business.

TECHNICAL ASSOCIATES IN KASHMIR & AFGHANISTAN

NICK EVANS, Parry Associates director and an independent structural engineer, is visiting Kashmir and Northern Pakistan. Nick has played a leading part in JPA's recent major overseas assignments in Gambia, Malawi, Mozambique and Sierra Leone. As well as reconstruction advice, Nick will be able to provide the authorities with a greater understanding of why so many houses and classrooms came down causing such heavy loss of life during the recent earthquake. Meanwhile, Robin Parker - JPA's associate field director - is in Afghanistan as an 'employment generation specialist', looking at income diversification to enable the rural population to gain sustainable livelihoods. On arrival in Kabul, Robin discovered that the World Food Programme, which imported a set of Parry semisheet equipment last year, has completed its first school with a micro concrete roof. There is now 'much interest in the venture from Afghanistan's Ministries of Housing and Education.

MANUALLY-POWERED ROCK AND RUBBLE CRUSHER BEGINS WORKSHOP TRIALS



The new crusher under test

ALTHOUGH JUST ONE small contribution of funding has so far come in to support the development of a rock and rubble crushing machine, with a little more pledged but not received, world events have made the case for creating such a machine even more compelling (see Parry News

reciprocating 'hammer-head' of the new machine, acting against a static 'anvil' face, nips the material with a powerful force generated by a pair of heavy swinging pendulums combining the inertia of over 200kg in weight with a leverage in excess of 20:1. In comparison trials undertaken by Gambian trainee technician Abou Manneh and monitored by Pakistan-born technical scrutiniser Rehana Khan, hard lumps of concrete were reduced to graded aggregate (gravel, sand and dust) three times faster than the same task carried out using a lump hammer. Considerable interest in the new machine has emerged from countries in Africa and Asia.



Comparison trial in progress

42). Added to the total fund of grief and discomfort for the people of Sri Lanka, Aceh (Indonesia) and Tamil Nadu (India) are the thousands in north east Pakistan and Kashmir. The familiar sight again is of survivors standing amidst piles of rubble.

JPA went ahead with the development anyway - and now has a machine that does the job, turning fist-sized lumps of rubble into sand and gravel for rebuilding. In the end, rather than start with the proverbial 'blank sheet of paper', JPA engineers and designers undertook a rapid adaptation of a machine developed 25 years earlier. This breaks hard lumps of clay down to dust for brickmaking. Provisional results have been very promising. The



Crushing stone manually in Malawi

LOW-TECH RAIL TO EASE THE COST OF FARM AND MINERAL TRANSPORT

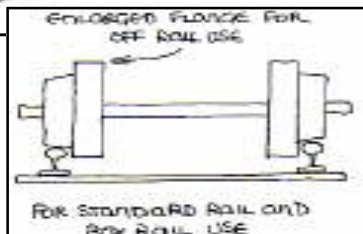
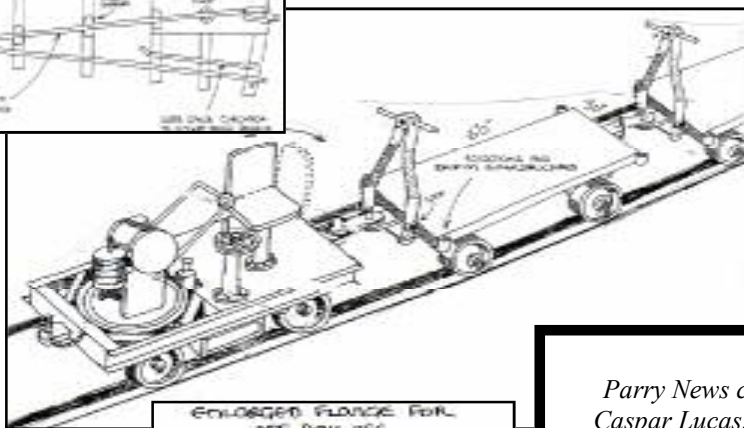
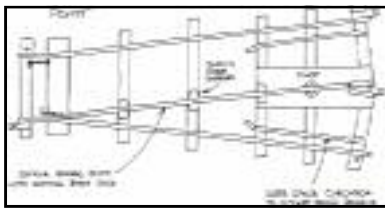
Road profile wheels facilitate manoeuvring of rolling stock beyond end of line

FARMER-DESIGNER-RAILWAY specialist Colin Saxton of Redruth, Cornwall, has put forward a simplified rail concept to Parry Associates which is so neat and practical that it needs to be taken up. Colin services his own farmland with a 2-foot (610mm) gauge railway that can get fodder to the muddiest corner of his most distant field. His battery-electric locomotives and trucks perform the same task as a Landrover for a fraction of the energy cost without churning up wet ground. Many parts of the developing world have roads which only function during the dry season. During the rains they become mud wallows with vehicles only able to move at walking pace and often not at all. Unfortunately this is often the time when farm produce needs to be moved or when the products of extractive industries - salt, coal, iron or copper - start to pile up, unable to reach the

market. Colin's ideas include methods of constructing rolling stock and track with everything easily manhandled and assembled in remote situations. He also favours wheels with enlarged flanges which can be manoeuvred off-rail on any reasonably hard ground. His single bladed points have special

wide space check rails to allow the flanges to pass.

JPA have raised this prospect with their light locomotive collaborators, Clayton Equipment, who have agreed in principle to co-operate in the introduction of the simplified railway concept. The agenda will include the development of a new, economical locomotive with a hybrid traction package similar to that used in the PPM passenger vehicles. Colin Saxton and JPA are in discussion over the establishment of a Farm & Mineral Railway Training Centre with residential accommodation, just north of Redruth. In addition to the farm facility, local expertise is available from present and former light rail operators in the Cornish mining and quarrying industry.



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