

# The Crucible

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**Focus on the Implications of Dodd-Frank**  
**Interview with William Millman of AVX**





Maria Cox, MMTA General Manager

## MESSAGE FROM THE MMTA EXECUTIVE

It has taken far longer than we ever anticipated, but we are finally in a position to launch our long-awaited new MMTA website.

Please take some time to explore it, and give us feedback—we intend for it to continue developing, with new content and features being added all the time.

Some of the new features to take note of are:

- An improved members' directory, offering more specific search functionality and advertising of member services, increasing visibility in search engines and usability by visitors to the MMTA website. As with the previous website, members can add their logos to their directory page, and can link through to their own company websites.
- The ability to book and pay for events online, improving security and streamlining the process for members.
- The Resource Centre: a repository for materials and links of relevance to the minor metals sector. This area will be developed over the coming months, and one of the functions of the Executive will be to ensure that members are kept informed of developments in the academic, scientific and political arenas relating to minor metals.
- A members-only discussion group, which will provide a private forum for members to discuss topics of interest and submit their own views on issues relating to minor metals.
- The ability to renew subscriptions online, saving time and streamlining the process.
- More information on the activities of the various MMTA committees.
- A members-only area of the website, where information not available to the general public can be found. This area will be developed over the coming months.
- Free job advertising on the MMTA website for MMTA members—save



on recruitment costs.

- Areas coming soon will be information on sampling and assaying procedures, finalisation of the MMTA contract template, and a thorough review of the metal norms, all of which will be uploaded to the new website once complete.

The Main Committee has been considering the most effective way of making members aware of issues of both interest and importance, affecting the markets and applications, as well as the regulatory context of the minor metals industry. With improved lines of communication—the expanded Crucible and the new website, for example—the opportunity exists to develop a more dynamic approach to providing members with information. Looking ahead, the Executive, along with interested members, will take on an increasing role in this area.

Another recent development is the end of the Trade & Lobby Committee, brought about by the lack of common MMTA lobbying position. The Main Committee wishes to thank Charles Swindon ([RJH Trading](#)), Nick Trillwood ([Delta Products](#)) and Michael Ihlenfeld ([FW Hempel](#)) for their hard work and commitment.

Finally, we would like to ensure that as many MMTA members as possible are receiving the Crucible and hearing about our events, both social and educational, so if you have colleagues who do not currently receive our communications, please let us know.

**Maria Cox, General Manager,  
MMTA**

## DIARY DATES

- **39th Anniversary Dinner, Intercontinental Hotel, Park Lane, London, UK, 16th October 2012**
- **Dinner and site visit to Firth Rixson, Sheffield, UK, 14/15th November 2012**
- **New York Dinner, Cornell Club, New York, USA, 5th December 2012**
- **MMTA Christmas Lunch, Pewterers' Hall, London, UK, 12th December 2012**





## LETTER FROM NORTH AMERICA

Dear Fellow Members

It's still warm here in New York, and one of the few signs that autumn will soon be here is that the days are already noticeably drawing in. The sun has yet to rise when I now get up in the mornings!

However, the slow wheels of the law roll inexorably on, and the morning of Thursday, August 23<sup>rd</sup> was a dark one for some, in particular for those either still content to receive certain minerals, whether raw, processed, or in manufactured component form, originally sourced from African conflict zones, or dis-contented, especially from the point of view of cost, about certifying whence these minerals originally came. The previous day, in tight votes, the SEC adopted two controversial provisions, sections 1502 and 1504, of the *Dodd-Frank Wall Street Reform and Consumer Protection Act* (more commonly known just as Dodd-Frank) enacted in July 2010. Of the minerals covered, members of the MMTA will be most concerned with the effect of the law on the trade of tantalite and wolframite.

Whilst section 1504, dealing with the transparency of resource extraction deals, may be of only passing interest to MMTA members, this will, perhaps, not be the case with section 1502. In this section of the act, dealing with so-called "conflict minerals" originating in the Democratic Republic of the Congo (DRC), and neighbouring countries, Congress is trying to do its bit to counter violence in that part of Africa.

Now that the SEC has, although tardily, actually adopted its [rule](#) (all 356 pages of it) relating to section 1502, it is, I believe, worth members noting several specific aspects both of it and the section. (Don't worry, I have no intention of dissecting either or, indeed, commenting on either's merits.)

First, although the act (page 844) describes conflict minerals as "*columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivatives*", the SEC rule (page 352) limits the derivatives, now, solely to "*tantalum, tin, and tungsten*." Niobium (or columbium as it is often called here) is excluded as a derivative. However, it is essential to note that the US Secretary of State can include not only other derivatives, but also "*[a]ny other mineral or its derivatives*" (Ibid) determined as "*financing conflict in the Democratic Republic of the Congo or an adjoining country*."

And this brings us onto the second noteworthy aspect. The section covers conflict minerals originating not only the DRC, both also all "adjoining" countries with which it shares "*an internationally recognized border*". These countries are: Angola, Burundi, Central African Republic, the Republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia. This swathe of countries covers a significant proportion of Africa's land-mass.

Finally, quite apart from both the geographical, and (potential) materials, sweep of the section, there is also the temporal aspect: the act and rule are open ended. Framed in the present tense, the rule is, necessarily, forward looking and would appear to cover other possible *future* conflicts of a similar nature to the current situation in the DRC – even if in another, adjoining, country.

On a completely different front, I always think it is worth keeping an eye on what the US Department of Defence (DoD) is interested in – publicly – when it comes to minor metals. One way of doing this is to look at what it is seeking, through its various arms, by way of proposals. At the end of July, in particular, its sponsorship of seven topics in the *Critical Materials Technology Focus Area* caught my attention. The topics were:

- Advanced Separation Technologies for Extraction of Rare Earth Elements (REE)
- Novel Primary Processing of Scarce Element Ores
- Novel Electrolytic Extraction Processes for Scarce Elements
- Efficient, Environmentally-Compatible Recovery Technologies for Rhenium and Other Strategic Critical Materials
- Theory-Driven Protocols for Replacing Elemental Composition of Strategic Materials
- Sustainable Alloy Design: Rare Earth Materials Challenge
- High Strength and Toughness Tungsten Carbide (WC) with non-Cobalt (Co) Matrices

Should you want further details of what the Assistant Secretary of Defence (Research & Engineering) is after, you can find the relevant [document](#) in the DoD's Small Business Innovation Research [resource center](#). Both it and the site are well worth having a look at.

With best wishes from New York to MMTA members everywhere.

**Tom Butcher, [Hard Assets Investor](#)**

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## MMTA'S 2013 INTERNATIONAL MINOR METALS CONFERENCE

Organised by [Metal Events Ltd](#)



**Mandarin Oriental**

**Hotel, Washington DC**

**April 24th—26th 2013**

**Book before 31st  
October 2012 to take  
advantage of the  
MMTA members'  
early-bird rate of  
£650.00**

This is a saving of £200 per person on the non-members' rate and 40% off the full fee.

- Find out the latest information from the leading experts and industry movers and shakers
- Networking opportunities—over 250 expected again next year
- Value for money—special rates for MMTA members mean this event is always fantastic value for money
- If you are going to attend one minor metals event in 2013, then make sure it is this one.

## MINOR METALS INSIDER



*Trevor Tarring competing in the 2008 Frazer Nash Race at Cadwell Park. Photo: Mark Ballard*

### Could the Libor scam have lessons for the discovery of minor metals prices?

A lot of commentators on the Libor manipulation scandal have been telling us it is "the index most people haven't heard about". More fools them! It has acquired a place in financial markets every bit as influential as Metal Bulletin prices are to Minor Metals or

for minor metals, ores, alloys and scrap, we also gave the effective world free market prices for aluminium and nickel (which, incidentally, was still classed as a minor metal when the MMTA was formed in 1973). As with LME prices for older metals, the volume of price-taking business indexed on those quotations gave them considerable authority. But unlike the LME prices derived from open outcry trading across

*Following on from last edition's Minor Metals Insider, we have two differing views - from Trevor Tarring and Guy Darby (right) - on the benefits or otherwise of a price discovery system for the minor metals trade.*

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LME prices are to base metals.

But the good thing about Libor being put under the spotlight is that at least a lot more people have had a chance to peer into the engine room of how values of an important index are discovered.

Libor is not a price, but those of us in the physical commodities world can see that the way it is formed puts it squarely in the domain of price discovery. And people in metal markets have a lot of experience of price discovery, both as participants in the price-making side and as price-takers. So it is quite permissible for us lesser mortals who only know about physical commodities to comment on the strengths and weaknesses of the Libor formation process.

Back in the sixties and seventies, when I was in the front line of Metal Bulletin's price discovery activity, we not only gave prices

the ring, MB prices then would be hard to justify by reference to the method of discovering them, depending as it did on an assessment of input information that could rarely be verified with the necessary speed.

Back in 1997 in my book "Corner", which covered metal market manipulations over the preceding century, I tried to summarise why trade newspaper-discovered price indications actually work, despite the unconvincing nature of any explanation you can give of the methodology. This was in the context of tungsten ore, which in the thirty years after the end of WWII was notoriously the most volatile metal market, so the one whose price discovery was the most contentious:

*"It is often argued that the trade is under no obligation to tell the journal about its recent trades - or indeed anything at all..."*

## MINOR METALS INSIDER—CONT'D

*"But this overlooks the fact that the process has been going on in many of the markets covered for the eighty-odd years the journal has been in existence. A large body of principles and practice has evolved to make the process consistently reliable. 'The proof of the pudding is in the eating' and the fact is that in a year many millions of dollars' worth of these metals, ores, and alloys change hands every day based on 'the price as published in Metal Bulletin',"*

My answer to this dilemma was to set a high barrier for our getting the prices 'right' - at least most of the time - by saying that what we aimed to produce was "God's price". By this I meant a price that would be discovered by an omniscient being with access to the details of every single deal done in the reporting period. This reflected the belief I shared with my fellow journalists that what we had to offer the trade was our commitment to and belief in the objectivity of the price we were producing. Of course, today there is a small band of other toilers in the same trade newspaper vineyard, including *American Metal Market*, *Metal Prices*, *Metal Pages* and *Platts*. Beyond metals, other trade newspapers are producing price indications for oil, fuels, softs and

chemicals, which are equally central to the commercial life of their respective industries.

Some elements of the methodology for forming Metal Bulletin quotations have changed since those days. What has not changed is the conviction of those making those quotations that they are in charge of the process and have a responsibility to get the right answer. Maybe that is what has been structurally missing from Libor, where the 'discoverer' is a trade association, not an independent journal. Looking back, it suggests that the MMTA members' vote in 2010 to cease discussion of a Open Price Discovery System (OPDS), which was to be implemented in conjunction with the LME, was a good decision. A trade association has many functions, but one that appears to set prices becomes not an association but a cartel. The MMTA did well to keep the distinction that, while its individual components are individually concerned with trade and profit, when its various entities come together as an association it is for the wider benefit of its community in a non-profit-making way. A Libor-type scam could not come to the MMTA because the price discovery system remains entirely removed from its direct control.

**Trevor Tarring, Former Chairman and Editor of The London Metal Bulletin**

If you wish to comment or provide an alternative point of view, please contact [maria@mmta.co.uk](mailto:maria@mmta.co.uk).

## LETTERS TO THE CRUCIBLE

Dear sirs,

**I write in response to Kris van den Broeck's article regarding price discovery, which appeared in the July edition of the Crucible.**

Kris may not have been aware that the MMTA invested a considerable amount of time in collaborating with the LME, in order to find a workable alternative price discovery system to the journalistic format that currently dominates the minor metal industry. The result of that collaboration was an MMTA/LME online price discovery system, the aim of which was to provide an effective, representative pricing by collating bids and offers of metal prices to create a weekly quotation set by market participants. The proposed mechanism would have allowed contributors to submit bid/offer prices based on MMTA standard specs for prompt delivery on an in warehouse Rotterdam basis. Prices would be collated once a week and a "quotations committee" made up of MMTA and LME personnel would review and publish prices accordingly.

This system was presented to the membership and members duly voted against a continuation of discussions with the LME. Either they felt the system was flawed or that the current less transparent journalistic price discovery system was preferable.

In my view the system which was evolved was about as good as you could get without having the metal traded on an exchange in fact, again in my opinion, both cobalt and molybdenum pricing would have worked better using this system than being launched on the LME!

If Kris, or indeed anyone else who is not familiar with this system, would like to know more, I am sure the Executive would be happy to forward the system framework that was made available to members in 2009.

Yours sincerely

**Guy Darby**

**Darton Commodities**

**MMTA Chairman 2009-2012**





## MMTA INTERVIEW: WILLIAM MILLMAN OF AVX ON DODD-FRANK AND TANTALUM

Picking up on our Letter from America, and following his fascinating presentation at the MMTA's International Minor Metals Conference earlier in the year, I recently interviewed William (Bill) Millman, Technical and Quality Director of the AVX Tantalum Division, to find out more about tantalum developments, particularly in light of the US Dodd-Frank Act. Bill has been involved in all aspects of the tantalum capacitor industry for over 37 years including research, development, engineering, materials, process and new product development, as well as serving 3 terms as President of the Tantalum-Niobium International Study Center (T.I.C.).

*“What trade exists is now more likely to be smuggled ...”*

### SOME IMAGES FROM THE SOLUTIONS FOR HOPE PROJECT



view of the artisanal operations and water pit/tank for the artisanal mine operations. July 2011



view of water pit/tank pump as part of MMR's efforts to enhance and mechanise the mine. July 2011

### The Impact of Dodd-Frank

*MMTA members will be particularly interested in understanding more about the impact of the Dodd-Frank law, which is radically changing the trade flows of tantalite to market, and I enquire whether its high-minded aim, e.g. to prevent the involvement of militias in artisanal mining, is changing, or will change, the environment for communities on the ground in a positive way, given that compliance is clearly expensive and bureaucratic.*

Bill responds that “according to the latest report from the UN Panel of Experts on the conflict region, sales of the affected minerals (3T's and Gold) have fallen to less than 30% of their previous level. The report goes on to say that what trade exists is now more likely to be smuggled, with more of a focus on higher added value minerals such as gold, which is easier to hide and carry out of the region. So the impact is clear, but the unintended consequences are also clear - additional hardship and social dislocation for the area and surrounding regions”. He feels that the act alone will not resolve what is a long standing, complex and seemingly intractable issue, but pro-active engagement to help provide a legitimate outlet for truly conflict-free minerals will help.

*My second question is to ask whether one of the effects of Dodd-Frank will be to increase the viability of mines in non-conflict zones and, if so, why Australian production – which is clearly non-conflict – has reduced in this period?*

Bill answers that “the cost of hard rock mining, such as in the case of Australia, is quite different from a largely artisanal based one. Hard rock requires a great deal of long term investment and subsequently requires a long term view throughout the supply chain. This is not typical for the electronics materials industry and is not limited to that of tantalum. So it has been publically stated that at the present world market prices the owners of the Australian mine do not see a viable option. However, the price of Ta<sub>2</sub>O<sub>5</sub> has been at a high level that historically has never been reached before in a sustained fashion - so it will eventually encourage new mining ventures, expansions of existing lower cost mines and semi-industrialisation of present artisanal ones - but all of this will take considerable time”.

He believes that this will occur worldwide and that there will be a 'premium' on 'conflict-free' locations, limited as industry grows more accommodative of 'closed-pipe' models for delivery of conflict-free minerals from the greater region.

## INTERVIEW..... CONT'D FROM PAGE 6

### What About Scrap?

*I think MMTA members, supplying Tantalum metal into the super alloy industry would be interested to hear Bill's advice with regards to compliance with Dodd-Frank. Given that they have not previously had to consider where raw material behind their scrap may have originated from, I wonder to what extent they need to know now?*

He advises that "if they are genuinely purely sourcing from scrap, then the act's regulations are accommodating. However, given the general tightness in the market, the generators of that scrap are now moving to a closed-loop arrangement, whereby the scrap stays in-house, so such sources are likely to dry up".

Bill states that "the electronics industry, as represented by the EICC (Electronic Industry Citizenship Coalition)/GeSI (Global e-Sustainability Initiative), and industry bodies such as ITRI (Industrial Technology Research Initiative) and the TIC (Tantalum-Niobium International Study Centre), took the issue of conflict minerals very seriously even before the act was signed, so have developed tools and mechanisms to be in compliance with the reporting needs, having deeply engaged with the United Nations, OECD (Organisation for Economic Co-operation & Development) and the stakeholders in and around the region of the Great Lakes through the ICGLR (International Conference on the Great Lakes Region)".

### Dodd-Frank Compliance

Bill suggests that MMTA members seeking advice on how they should comply with Dodd-Frank should take note of the following:

"There has been dialogue now between other industry bodies, including automotive and aerospace, with the EICC/GeSI bodies to try and ensure alignment as regards such initiatives as the use of validated conflict-free smelters (CFS), in-region sourcing and reporting templates." Reassuringly, he says that "much of the work is already done and is now just being fine tuned, so

*"The electronics industry ... took the issue of conflict minerals very seriously even before the Act was signed"*

the language of the OECD Due Diligence Guidance, as cited by the Act as a reasonable source of enquiry, and that of the Act are compatible. The Act itself allows for a phase-in period, dependant upon the size of the company, but much of the heavy lifting has already been carried out by the electronics sector, so I would encourage everyone to follow these initiatives, templates and tools".

### The Role of AVX

*I am interested to learn more about AVX's role in these developments, as we understand that the company has been a leader in complying with Dodd-Frank, involving local communities in shareholdings in designated audited mines, and ensuring traceability of ore via tagging and bagging from source. While this has been onerous, has it also been an opportunity for AVX to show market leadership and corporate social responsibility and, in this manner, to ensure that leading brand customers, such as Intel and others, can be comfortable that no link between a consumer product and suffering in the Congo exists or can be implied?*

THE MMTA XMAS LUNCH  
PEWTERERS' HALL,  
LONDON, 12TH DEC 2012



The MMTA's Christmas lunch will this year be taking place on Wednesday 12th December at a new venue: Pewterers' Hall, headquarters of one of London's historic livery companies.

It is the perfect way to end the year and catch up with colleagues in the minor metals industry, or even use it as your own company Christmas celebration.

The MMTA will be welcoming members and associates to the Livery Room, which is adorned with a wide range of pewter artefacts, including an impressive pewter chandelier. Guests will enjoy a drinks reception, followed by a 3-course lunch including wine and port.

For more information on this annual event, please contact the [Executive](#). Full details and bookings will be available from early October.

This year's lunch is kindly sponsored by Crowe Clark Whitehill.



## SOME IMAGES FROM THE SOLUTIONS FOR HOPE PROJECT



View of the mining operation at the Mai Baridi mine. July 2011



The President of the Congo Artisanal Mining Cooperative (CDMC) demonstrating the tracking and logging process at the Mai Baridi mine. July 2011



Workers at the Mai Baridi mine demonstrating the analytical process used at the mine to establish baseline ore concentration. July 2011



SAESCAM agent weighing and logging minerals at the Kisengo mine. July 2011

## INTERVIEW...CONTINUED FROM PAGE 7

Bill responds that, “as part of its ongoing commitment to a conflict-free supply chain, AVX has been at the forefront of industry’s efforts in developing standards for the supply of tantalum from the mine to the ultimate customer, and is an active participant in the EICC (Electronic Industry Citizenship Coalition) and GeSI, the Global e-Sustainability Initiative Conflict-Free Smelter program, as well as the TIC (Tantalum-Niobium International Study Centre) to avoid the use of tantalum ore which directly or indirectly finances or benefits armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries, and fully supports the position of the Electronic Components, Assemblies and Materials Association (ECA) toward the same result”.

AVX has gone further, and “since December 1st, 2011, has exclusively sourced the tantalum powder and wire used to manufacture its tantalum capacitors from smelters whose compliance with the EICC and the GeSI Conflict-Free Smelter program has been verified. Now, the exclusive use of EICC/GeSI-validated smelters and compliance with the OECD Due Diligence guidance is expected to be the cornerstone of pending SEC regulations concerning the Dodd-Frank legislation”.

Bill points out that by “employing only EICC/GeSI independently validated, conflict-free smelters, in addition to our own supply chain assessment activities” AVX has been able to “assure our customers of our compliance with the OECD due dili-

*“Verifiable conflict-free tantalum ore can be mined and shipped in a manner that is reliable, sustainable and expandable.”*

gence guidelines, as well as with the provisions detailed in the Dodd-Frank law”. He also expects that “the conflict-free tantalum policies that we already have in place will make us compliant with SEC regulations”. He notes that although “several other manufacturers are making efforts to attain validated compliance with these provisions, at present, AVX is the only company that meets these exacting standards”.

### Solutions for Hope

Bill explains the background to the Solutions for Hope (SfH) project. “AVX has been very heavily involved in the issue of conflict tantalum stretching back to 2000 when tantalum last took a huge price spike and was implicated in possible funding of armed groups in the DRC”.

“When the electronics industry started to get seriously involved 3 years ago through their industry bodies, EICC and GeSI, we were a natural candidate to assist in having a wide range of stakeholders better understand the dynamics of the supply chain, players, processes, end uses and market drivers”.

“So we become deeply engaged with the issue through collaborative work with the EICC/GeSI Extractives Work Group on Conflict Minerals, which then lead to numerous international meetings with the UN, OECD, ICGLR and NGO's to try and develop tools, protocols, procedures and mechanisms to eliminate conflict minerals from our supply chains”.

“From our discussions it was clear that while the tools were in place it needed someone to exercise them - so AVX become the banker of last resort and financed the purchasing of ore from the DRC through what we developed as a 'closed pipe' model of delivery to verify if it were possible to deliver validated conflict free materials to the world market”.



## INTERVIEW...CONTINUED FROM PAGE 8

“At that time we had a single customer agree to take the resulting product - Motorola Solutions, quickly followed by Intel, HP, RIM, Nokia, Bosch and others. Up until then we had a pilot supply chain, but were taking a high reputational and financial risk - nevertheless we considered it vital that we engaged with the region, rather than just walking away and allowing an unintentional, de-facto embargo to destroy the very little income that the indigenous peoples had, creating widespread hardship for those whose livelihood depends on the mines”.

“The year-long programme has demonstrated that verifiable conflict-free tantalum ore can be mined and shipped in a manner that is reliable, sustainable and expandable. This allows a third-party verified “closed-pipe” supply route in the DRC using EICC/GeSI validated conflict-free smelters to become a trusted source of conflict-free minerals to the tantalum industry. The SfH programme has gone from strength to strength and is now being replicated elsewhere and with minerals other than tantalum”.

Bill explains that “the closed-pipe supply chain will enable AVX to have full traceability of its usage of DRC and other Central African material, and the supporting chain of custody information to confirm the material is verified as conflict-free, to enable customers to meet the requirements of the Dodd-Frank legislation and the SEC disclosure requirements”. As a result of this, he says, “AVX will begin to incorporate independently audited, fully traceable, and verified conflict-free ITRI Tin Supply Chain Initiative (iTSCI) ‘Bag and Tag’ tantalum material, sourced through AVX-approved, closed-pipe supply routes in the DRC and adjoining Central African countries, into its general SMD tantalum capacitor products beginning January 1st, 2013”. Clearly, this not only makes sense in terms of the humanitarian perspective, but also in business terms.

“This is a further step in AVX’s continuing effort to keep conflict minerals out of the supply chain without adversely affecting miners and their families in non-conflict areas and to ensure our customers can comply with the requirements of the Dodd-Frank legislation. It ensures that AVX remains at the forefront of the tantalum capacitor industry’s efforts to secure responsibly sourced materials that meet our customers’ requirements, the principles of the Dodd-Frank legislation and the OECD due diligence guidance on responsible sourcing of minerals from conflict affected areas with weak governance”.

If anyone would like to learn more about AVX’s activity and policies in this area, please refer to the links below for more information:

*AVX is fully aware of the provisions of § 1502 relating to conflict minerals of the Dodd-Frank bill and is closely tracking the SEC’s implementing regulations. AVX usage of the other materials, such as tin, tungsten and gold, listed in the new legislation is very limited. AVX is working with its suppliers to ensure that no other conflict materials are in any of its products. Nonetheless, AVX is committed to meet or exceed all obligations with respect to those minerals as well.*

For full details of the AVX Conflict-Free Materials policy please visit AVX On-Line at: <http://www.avx.com/> or <http://www.avx.com/docs/corporate/AVXConflictMinerals.pdf>

For additional details about the Solutions for Hope Project, please visit <http://solutions-network.org/site-solutionsforhope/> or contact Bill Millman at AVX by phone at +44 (0) 1803 697211 or via email at [conflict.free@eur.avx.com](mailto:conflict.free@eur.avx.com).

**By Maria Cox, General Manager**

MMTA’S 39TH  
ANNIVERSARY DINNER

TUESDAY 16TH OCTOBER



**This year’s MMTA Anniversary Dinner will be taking place at the Intercontinental Hotel, Park Lane, London.**

Well over 200 people have already booked for this event, so if you would like to attend, please contact the [Executive](#) as soon as possible.

This year’s event will include a drinks reception, kindly sponsored by Roskill Information Services.



This year’s main dinner and raffle in support of the Cary Mufulira Community Partnership Trust are kindly sponsored by C Steinweg .



The drinks reception and dinner will be followed by a live band and dancing for those who wish to continue the evening.

SITE VISIT TO FIRTH  
RIXSON, GLOSSOP, UK  
NOVEMBER 15TH 2012



Join the MMTA on this exciting visit to one of the major consumers of minor metals.

Firth Rixson is a world-leading provider of Seamless Rolled Rings, Closed Die Forgings, Open Die Forgings, Extruded Forgings and Specialty Metals to primarily the Aerospace market, as well as a spectrum of related markets.

Supplying to over 40 countries worldwide, mainly to Aero-Engine and Aero-Derivative Programmes as well as to Landing Gear Components, Off-Highway Trucks, Gas Turbines, Oil Rigs, Armoured Vehicles, Commercial Trucks and for Cast Stick and Wrought Ingot and Billet customer demand.

The programme for this fascinating site visit will involve an introduction to the facilities at Glossop, a factory tour followed by lunch, which will be kindly provided by Firth Rixson, then a presentation and Q & A on the work of the company.

For those based in the area or arriving the evening before, there will be an informal dinner at Browns in Sheffield on 14th November.

For more information or to make a booking, please contact the [Executive](#).

Please note, this is a members-only event, and numbers are strictly limited.



## KEY CONSIDERATIONS WHEN TRAVELLING ABROAD FOR BUSINESS

Crime, floods, earthquakes, medical emergencies and transport delays - travelling, whether for business or pleasure, is not without risk and already stressful situations can be made worse by unfamiliar environments, cultures, language barriers and weak infrastructures.



While most trips pass without incident, employers have a legal duty of care to take all reasonable steps to ensure the safety and welfare of their employees. This extends to ensuring staff are appropriately advised and briefed prior to embarking on overseas trips.

Companies are often guilty of overlooking basic precautions to safeguard employees; careful assessment and consideration are required to reduce employee vulnerability and potential for corporate liability.

The first thing to do is identify and assess the risks associated with the country and specific travel locations:

- What is the current political and social climate?
- Is it safe to travel to the country or areas within it?
- Is travel essential or can business be conducted without travelling, for example by video conferencing (this may also fit with company environmental policy)?
- What safety and security issues are there - will local security support be required?

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*“Companies are often guilty of overlooking basic precautions to safeguard employees...”*

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- Will local laws and customs impact on travel or business activities?
- What is the level of general crime and corruption?
- What are the health risks - will vaccines or medication be required?
- Does the employee need personal security awareness training?

Information is available from many sources on the internet; however it is important that companies do not base their decisions on out-of-date or unreliable sources. Experience is required to ensure appropriate, proportionate advice is given prior to travel.

### Before you travel:

- Register the trip with your government – examples include the Foreign & Commonwealth Office LOCATE service ([www.fco.gov.uk](http://www.fco.gov.uk)); the US Smart Traveller Enrolment Program (STEP) (<https://step.state.gov/step>) and the Swiss ITINERIS system ([www.itineris.eda.admin.ch](http://www.itineris.eda.admin.ch)).
- Make use of country hosts, they are an invaluable source of information; where possible arrange local travel through them.
- Acquaint yourself with where you will be travelling – get a map, use Google Earth and Maps where available.

## KEY CONSIDERATIONS WHEN TRAVELLING ABROAD FOR BUSINESS CONT'D

- Check your passport expiry date - do you need a visa or work permit?
- Copy your passport details page and store it online; leave copies with a key work contact and family members.
- Provide your itinerary to the key contact – details should be treated on a “need to know” basis.
- Make sure your travel/health insurance is up-to-date and covers the destination country, business travel, loss or theft of cash/valuables and medical evacuation.
- Check whether local customs or extreme weather may affect your travel e.g. festivals, public holidays, hurricane season
- Confirm you have the numbers to cancel credit cards/travellers’ cheques.
- Write essential contact numbers down; keep them separate from your wallet or purse. You may lose your mobile phone, so do not rely on storing them on the device.
- Confirm your mobile phone and voicemail will work where you are going - an additional number to dial in to the voicemail service or a local SIM card may be required.

**Angus Darroch-Warren, CSyP, [Linx International Ltd](#)**

*Angus Darroch-Warren is a Chartered Security Professional with Linx International Ltd, an MMTA member providing security advice and risk management support to a number of corporate clients.*

## NEW INSURANCE TASK FORCE

Following his addition to the Main Committee, Rob Bolton, of [Aon Risk Solutions](#), will be chairing our new Insurance Task Force.

The purpose of the task force, says Rob, is to “maintain good communications and increase awareness between the minor metals and credit insurance industry, to ensure there is no dislocation of credit insurance provision in the current turbulent environment”.

Who else in your organisation would benefit from receiving the Crucible and hearing about MMTA events and courses?

Please contact Emma or Maria with details.

## CONGRATULATIONS TO AVON METALS

On 21<sup>st</sup> April 2012, [Avon Metals](#) was proud to be honoured with a 3<sup>rd</sup> prestigious Queen’s Award, in Her Majesty’s Diamond Jubilee Year.

The award was conferred in recognition of the company’s outstanding performance in the International Trade category, demonstrating sustainable growth and profitability through increased trading worldwide. Notable areas of expansion include the United States, Middle East and Eastern Europe.

The company has previously won 2 Queen’s Awards in 2009 (Sustainable

Development) and 2007 (International Trade).

Chairman Walter Reid, CEO Steven Munnoch and all the Directors and Staff of Avon Metals thanked their business partners around the world for their continued business and support.

Avon Metals is a specialty alloy maker and metals trader. Minor metals handled include Tantalum, Tungsten, Niobium, Molybdenum, Rhenium, Titanium, Magnesium and Silicon, amongst others.







## NEW SCHOOL BUILDINGS IN MUFULIRA

**MMTA's industry link with Mufulira is a catalyst for MCM to build classrooms for the community.**

On March 27<sup>th</sup> 2012, visitors from the UK staying at our base in Mufulira accompanied MCM on a visit to two of the poorest schools close to the smelter complex, and one of the poorest hospitals. Following the visit, MCM agreed to help and support projects in the community.

As proof of their intent MCM agreed, and has now almost completed, the building of new classrooms at *Muleya Winter Basic School*, which suffers

from sulphur emissions from the nearby smelter.

This was the school that Rachel Swindon and Millie Patterson, children of MMTA members, worked at during their gap year visits.

Some facts speak for themselves:

**School:** Muleya Winter Basic School

**Children:** 1668

**Orphans:** 371

**Teachers:** 38

**Location:** Within 500 metres from the Mine & Smelter Complex of Mopani in Mufulira

*"We are trying to plant more orange trees, but we still face the challenge of acidity of the soil. But at least bananas are doing fine. As for the building, it is really going on well. As of now they are doing the plastering and roofing. Probably by Friday they will be through with the whole project. They are really doing a good job. The mines are very keen and usually visit the school almost everyday to check on the progress." Judith Shumba, Teacher*



*Ongoing work on the building of new classrooms at Muleya Winter Basic School*

Our thanks go out to Mr Emmanuel Mutati, Chairman of MCM, and his colleagues who accompanied our UK group and made this work possible.

It was during our visit that Mr Sole-sole, Head Teacher, presented plans for much needed new classroom blocks and it is amazing to think that what was no more than a slab on the ground is now ready to be inaugurated as functioning classrooms.

The MMTA's links and continuing dialogue with both Glencore Intl AG in

Zug and MCM in Mufulira are affecting change for the better, and I would encourage all MMTA members to support the continuing work by donations, personal interest and, even better, visits.

MMTA members, or young adults, wishing to join the next groups going to Mufulira in Feb 2013 or July/August 2013 should contact either me ([lipmann@lipmann.co.uk](mailto:lipmann@lipmann.co.uk)) or Dr Laura Tilling ([ltilling@waysideecc.freemasonry.co.uk](mailto:ltilling@waysideecc.freemasonry.co.uk))

We will once again be holding our raffle in support of the Cary Mufulira Community Partnership Trust at the MMTA's Anniversary Dinner on Tuesday 16<sup>th</sup> October at the InterContinental Hotel, Park Lane, London.

The raffle is kindly sponsored by C Steinweg.



**C. Steinweg**

## REACH IS 5 YEARS OLD

In 2007 REACH heralded a revolution in industry by reversing the burden of proof and requiring manufacturers and importers to prove their substances are harmless. Despite generating a significant amount of activity, it remains to be seen whether REACH will be more of an evolution rather than a revolution.

### Main Deadlines Under REACH

The deadlines not only apply to registrants, but also to Downstream Users who have to notify their uses to their suppliers.



Deadline	30 Nov. 2010	31 May 2013	31 May 2018
Substances concerned	≥ 1,000 Tonnes per year CMR* ≥ 1 Tonne R50/53** ≥ 100 Tonnes	100-1,000 Tonnes per year	1-100 Tonnes per year

\*Carcinogen, Mutagen, Reprotoxic

\*\*Very toxic to aquatic organisms

### REACH in a Few Figures

Over the past five years more than 27,600 dossiers have been submitted to ECHA (European Chemicals Agency) and 5,500 substances have been registered. 14 substances are currently subject to authorization (Annex XIV of REACH) and 84 are on the Candidate List. Before the next deadline on 31 May 2013, more than 2,600 additional substances are expected for registration, and ECHA expects to evaluate 90 substances between 2012 and 2014.

There is still a long way to go, however. Some important data published by ECHA at the beginning of June 2012 must be added to this list: more than 40 % of the substances classified as carcinogenic, mutagenic and toxic for reproduction (CMRs) have neither been registered under REACH nor notified under CLP.

### 2012 and Future Deadlines Concern More and More SMEs and Downstream Users

Although the 2010 deadline mainly concerned large groups (manufacture and/or import of substances above 1,000 tonnes/year), the following deadlines will increasingly bring SMEs all along the supply chain within the scope of REACH.

The tonnage bands that require registration are decreasing: 100 - 1,000 tonnes/year for the 31 May 2013 deadline and 1 - 100 tonnes/year for the 2018 one.

Consequently REACH is beginning to affect an increasing number of SMEs, who are often vulnerable, facing extremely constraining and often costly obligations. Their opinion of the regulation is often far from positive, finding it difficult to see the short-term advantages of its implementation, particularly with regard to competitiveness.

Not only does it appear to be essential for companies to think of REACH in terms of their wider strategies for product compliance management and occupational health, but also innovation and competitiveness. There is however an increasing concern that future research, and therefore innovation, may be thwarted by the removal of some substances and that efforts required for ensuring one's compliance to REACH will divert companies from investing time and resources in these missions.

### An Evolution Rather Than a Revolution?

REACH is evolving with time, although some would say not quickly enough, and the market and some of its provisions are becoming increasingly significant. The growing importance of Safety Data Sheets (SDS), the main vehicle for all information generated by the REACH registration process, is becoming evident, allowing the control of risks inherent in the substance's

uses to be guaranteed, but also placing an increased burden on importers into the EU.

Extended Safety Data Sheets (eSDS), with their complex elaboration of exposure scenarios for substances, are causing some difficulties to downstream users: it is not enough that they receive a multitude of scenarios from their suppliers, many of whom are taking the approach of 'if in doubt, send everything'; they have to verify that their own specific uses of substances conform to the numerous exposure scenarios they receive. eSDS can be extensive – all the more if they apply to a mixture – and companies, if not Europe, will have to find a way to communicate information in a readable and suitable format, so as to avoid information obesity. Ignoring this point would defeat the attempt to protect workers' health and at the same time destroy the very basis of REACH.

Article management is also causing more and more difficulties to companies, as they now have to communicate on the composition and safe usage of any Substances of Very High Concern (SVHC) which are present above specific concentrations. The importance of this provision, which was almost unnoticed at the beginning, cannot be emphasised enough. The composition of articles has never been the primary focus of producers, and information on their safe handling again poses the question of how to formulate recommendations and provide access to them.

Lastly, the coming years will be marked by the submission of authorisation dossiers to ECHA. These dossiers will determine if a substance classified in Annex XIV of REACH is authorised to stay on the market, and if so, for which uses and what period of time, subject to the implementation of a substitution strategy. Indeed, the authorisation period is renewable only once. The complexity of the authorisation dossier will mean that those impacted must think of REACH in terms of implementing global strategies within the company to anticipate market and regulatory evolution. There is also a discussion to be had on the subject of restriction of substances, and this process, as well as its future implications, is as yet unknown.

As it may be difficult to derive competitiveness and innovation gains directly from the implementation of REACH, it appears that questions on how to best and most reliably communicate information on substances, mixtures and articles could trigger business for many, especially for first movers. Though industry must not lack ambition, it must be borne in mind that a lesser disadvantage is also a competitive advantage. What the last 5 years have shown is that perhaps REACH is not only a 'ban and innovate' regulation: it is also fundamentally today's most evolved quality system. The fact that emphasis was never put on this point, but solely on innovation, while not giving companies the means to achieve such innovation, may explain why REACH has not yet lived up to expectations.

Pierrick Drapeau, [Ecomundo](#)

## MMTA LEGAL ASPECTS OF CONTRACTING

How robust are the contracts that your company enters into? At what point does a contract exist between 2 parties? What are the implied terms of a contract under English law? What is the jurisdiction of your contract? What is the governing law of the contract? What is the difference between the two? Does your company's standard terms and conditions apply to all your contracts? What are your options for recourse when a contract is not performed?

If you have a lack of clarity about the answers to any of these questions, I thoroughly recommend you take a morning out of work to attend the MMTA's next Legal Aspects of Contracting Seminar run by Donald Lambert of [Pennington's Solicitors](#).

On the 13<sup>th</sup> September, Pennington's ran this seminar for the first time for MMTA members. Participants ranged from trainee traders to senior experienced traders, and based on the feedback received, everyone found the content both stimulating and informative. A potentially dry subject was livened up with examples of cases illustrating the many points of law raised during the seminar.

When was the last time you read your company's standard terms & conditions? Most of us left the seminar knowing that it had been far too long ago.

Look out for the next course, which the MMTA plans to run again in early 2013.

**James Peer, Maritime House Ltd**

## NOT AN AVERAGE DAY IN THE LIFE OF DEBORAH STOTT, FIRTH RIXSON



*Deborah Stott, Firth Rixson & member of the MMTA Main Committee*

Six years ago a friend of mine, Paul Slattery of FC Stone, set up the Charity Ordinary2extraordinary ([www.o2e.org](http://www.o2e.org)). O2e's Mission Statement is: To make a difference to the lives of seriously and terminally ill children, whilst encouraging and supporting all ages to embrace sport and adventure, get out of their comfort zones and live life to the full.

I have been involved with the charity from the start, doing an annual fund raising event and, boy, have I done all of the above! I have taken part in all sorts of events from swimming the English Channel to competing in an ultra-marathon across the Gobi Desert in Mongolia. Each year I have pushed myself a little further and this year I will be trekking through dense jungle track of the Ujung Kulon National Park within the province of Banten, Western Java, again to raise money for O2e. As I self-fund all of my trips, every penny I raise goes to the charity.

What has stood out most for me during these events is the support and motivation you get from friends and competitors alike. My toughest challenge (to date!), in the Gobi Desert, was definitely one of the most difficult things I have ever attempted in my entire life. I did not complete the event in 2009 due to severe blisters, however, I returned in 2010, as I was absolutely determined to go back and finish it. The event is a 140 mile race carrying everything you need for

the week on your back in temperatures up to 52°C (that's hot I can tell you!). The weekend before departing for Mongolia, I did the 3 Peaks and fell and sprained my ankle. This did not deter me, and I still went ahead and completed the event, albeit with a rapidly decreasing sense of humour. The NLP work we had done at Firth Rixson on positive thinking made all the difference, and I doubt I would have finished had it not been for that and the unstinting support of the competitors and organisers of the event.

It's amazing what we can achieve with the right mental attitude, whether that is at work or in our personal lives. We only have one life, so live it!

In 2012 O2e are supporting: -

- **Get Kids Going** – Helping to get disabled children into sport (some of the athletes at London 2012 Paralympics got into sport via the Get Kids Going academy)
- **EACH** - supports families and cares for children and young people with life-threatening conditions
- **Sparkle** – helping children with complex disabilities by providing a purpose built centre to provide treatment, care, information, leisure facilities and consultations all under one roof

**Riverside School** – Riverside is a special school providing a wide range of opportunities for learning for children with severe and profound learning difficulties and autism.

If you would like to support my 2012 charity challenge you can donate via

<http://www.justgiving.com/DeborahStottJava>

**Deborah Stott, Firth Rixson**



## WHAT DO CHRISTMAS, ANTIMONY AND BISMUTH HAVE IN COMMON?

The answer is pewter. Ahead of this year's MMTA Christmas lunch, this year being held at the Pewterers' Hall in London, we wanted to find out more about a metal that has links to 2 minor metals.

Pewter has long been part of our history; it is essentially tin, but to be worked it has to be mixed with other metals.

The first charter, granted by King Edward IV in 1473, empowered the Company to regulate the trade throughout the kingdom, unlike the powers granted to the majority of other companies, whose jurisdiction was limited to the City and its environs. It carried out this function up to the end of the 18th century.

It could seize and destroy pewter below a certain standard, and also impose fines and other penalties on its members for failing to uphold the Craft. From 1503, an Act of Parliament required Members of the Company to register their 'Touchmarks', which were 'to be recorded on Tablets of Pewter' and kept at the Hall of the Company. The use of a Maker's Touchmark served not only to safeguard the Craftsman, but also to enable the public to have confidence in the quality of the product.



*Cold enamelled pewter cufflinks by Gordon Robertson (Winner of Pewter Live 2012)*



*Royal lidded porringer 1697 decorated with the busts of Queen Anne and Prince George.*



The alloy used today in pieces which display the quality touchmarks of the Association of British Pewter Craftsmen is in the range: tin 91-5% minimum, antimony 8% maximum, copper 2.5% maximum and bismuth 0-5% maximum, as determined by the European Standard for pewter. Modern pewter contains no lead.

Phoenicians traded for Cornish tin more than 2000 years ago, and pewter articles were made in Roman Britain. Use of pewter peaked in the 17<sup>th</sup> century when, from birth to death, people were surrounded by pewter: items for eating and drinking, bleeding bowls, bedpans, and snuffboxes; taverns used mugs and measures; churches used flagons, chalices, patens and baptismal bowls. This pre-eminence ended with the introduction of porcelain and pottery during the 18th century. Even so, pewter continued to be used for decorative purposes. Artists and craftsmen during the Arts & Crafts Period and the Art Nouveau Period used pewter and achieved superb results. For centuries pewter has had an enduring appeal. Today, it is valued by designers and craftsmen alike for its beauty and versatility.

Pewter may be fashioned in many ways: by casting in moulds of bell metal, steel or sand, using gravity method, by centrifugal casting, using rubber or silicone moulds, by spinning, on a lathe, by pressing, rolling or hand forming. The surface may be polished or darkened, engraved, etched or hammered. It may also be painted, enameled or decorated. If the artifact is unsatisfactory, the metal can be melted down (at about 250C) and reused without loss of quality.

Tin, the major constituent of pewter, is produced from tin ore, the major source of supply being the Far East and South America. Tin is completely non-toxic, melts at a relatively low temperature (232C), has very good fluidity when molten, has good formability, and readily forms alloys with other metals. It is a relatively soft metal and it is for this reason that it is alloyed with other constituents before being used in the form of pewter.

The Pewterers' Company has a fine representative collection of British pewter including many pieces of historical importance and items of quality contemporary pewterware; a representative sample is on display around the hall.

## MINOR METALS IN NEW YORK DINNER

The Cornell Club,  
New York

December 5<sup>th</sup>  
2012



Back by popular demand!

Drinks and extensive  
networking opportunities  
will be followed by dinner,  
all at the exclusive Cornell  
Club in the heart of  
Manhattan.

Our special guest speaker  
will be discussing topics  
critical to the minor  
metals markets.

The New York Dinner is  
kindly sponsored by



**American Flux & Metal**

For more information, or  
to register, contact the  
**Executive**

## MEMBER BENEFITS

Members only early-bird discount on tickets for the MMTA's International Minor Metals Conference, offering substantial savings on the full conference fee

Significant member discount on all MMTA event tickets, including the prestigious Anniversary dinner

Access to free meeting/training room space in central London

Free advertising in members' directories on the MMTA website, with improved search function, as well as other MMTA marketing publications

25% discount on Gold level membership of [REACHReady](#)

A range of educational & social events offering extensive networking opportunities

A dedicated Mediation & Arbitration service for MMTA members

A network of MMTA-approved warehouses, each independently inspected and having Indemnity Insurance to cover unexplained losses

A members only discussion group and area of the website for improved information sharing

Regular updates on the activities & accomplishments of the Association

Use of the MMTA logo & 'Member of MMTA'

Free job advertising on the MMTA website, saving on recruitment costs and directly accessing the target audience

Trade Regulations

Awareness raising on a wide range of issues of importance to the minor metals sector

**The MMTA promotes essential elements that add quality, safety and enjoyment to our lives.**



The MMTA is the world's leading minor metals industry organisation.

## “SO WHAT EXACTLY IS A MINOR METAL?....”

### Perceptions of the person on the street:

How do you explain the metals we trade to the average person walking down the street? Being part of the MMTA requires our answer to start “I trade in the metals that most people have never heard of”. After reeling off the more well known metals: “Aluminum, copper, steel, ... gold, platinum, and silver” ... “I don’t trade any of those”, people try and throw out the only other metals they know: “Titanium?” Most people think titanium is very expensive ... some even know tungsten.

When describing metals like tantalum, indium, molybdenum, rhenium; how could any of us reasonably expect the average person to know that our metals make their world spin? How could they know that the iPhone they are using to call us has a capacitor made with tantalum, or a screen coated with indium tin oxide, or that ‘silver’ look is actually a specially sputtered layer of high oxygen chromium? I’m sure many people reading this



*“I trade in the metals that most people have never heard of.”*

article didn’t even know niobium is used to block out specific light wavelengths in the new compact florescent light bulbs. Does the average person have any idea that the 100 kg of APR you just traded could one day be inside the engine of the jet they are flying on their next trip?

Scrap, to the average person, is perceived as shredding old cars and melting soda cans; everyday items that everyone can understand. But minor metals scrap deserves just as much attention in the everyday world. Using the iPhone example above, the scrap generated from making tantalum capacitors is commonly converted into tantalum oxide used in making carbide tooling for the automotive industry. The spent indium tin oxide (ITO) is refined to make new ITO, used in making the solar cells powering our homes. Spent Cr sputter targets are crushed back into powder and used to make high temperature electrical contacts to operate heavy machinery.

What is most amazing is that according to the US Geological Survey, in 2010, 65% of the apparent supply of metals used in the USA comes from recycling!

**David Gussack, [Exotech](#)**

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