

The All Clear

**Give me six hours to chop
down a tree and I will spend the
first four sharpening the axe**

Abraham Lincoln

RE: NUCSIG Event at Harwell on 11 March

Mark Lawrence

Sent: Fri 16/01/2015 16:24

To: 'Mark Lawrence'

Email revision 1

Richard,

Thanks for responding. My Title and outline as follows:

Title: **How to write good package instructions**

Outline: Mark Lawrence finds that having a pharmaceutical industry background is remarkably useful when it comes to managing quality in nuclear construction projects. Especially, when as is often the case, success or failure comes down to how well quality requirements are communicated. What can we do to encourage compliance, and how do we get from medical package instructions to construction packages?

Mark Lawrence | Quality Manager | Western | Construction | ISG mark.lawrence@isgplc.com

Parklands, Hambrook Lane, Stoke Gifford Bristol BS34 8QU

Mark Lawrence

You made changes to another copy of this item. This is the most recent version. [Click here to see the other versions.](#)

Sent: Fri 16/01/2015 16:46

To: 'richard.hibbert@research-sites.com'

Richard, **edit, I've un-garbled the last line of my previous outline.**

Email revision 2

Thanks for responding. My Title and outline is as follows:

Title: **How to write good package instructions**

Outline: Mark Lawrence finds that having a pharmaceutical industry background is remarkably useful when it comes to managing quality in nuclear construction projects. Especially, when as is often the case, **success or failure comes down to how well quality requirements are communicated. What can we do to encourage compliance, and how do we get from pharmaceutical packaging to construction packages?**

Regards, Mark

mark.lawrence@isgplc.com

Mark Lawrence | Quality Manager | Western | Construction | ISG

RE: NucSIG Event at Harwell on 11 March

Mark Lawrence

Sent: Tue 20/01/2015 11:16

To: 'richard.hibbert@research-sites.com'

Email and revision 3,
ad infinitum until you
make your message
clear

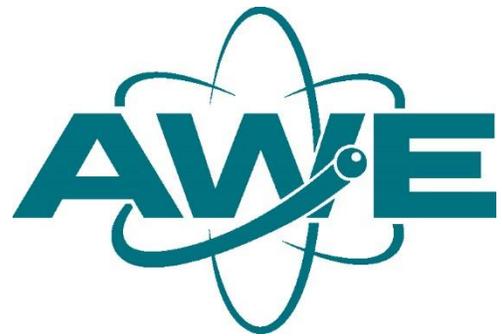
Hi Richard,

I've been thinking about the title again. Please list as follows:

The All Clear

How ISG have applied pharmaceutical industry standards of clear communication to construction project management at the Atomic Weapons Establishment.

Productive neurosis vs non-productive neurosis



Pharmaceutical vs Construction

- Quality is **joined** to health and safety
 - Workers tend to read more
 - Greater emphasis on gathering evidence for audit trail
 - Fitness for purpose is **implicit** – results are the product of analysis
- Quality is **separated** from health and safety
 - Workers tend to be more visual-spatial
 - Greater emphasis on demonstrating quality of work
 - Fitness for purpose is **explicit** – results are standing ‘bricks and mortar’

Nuclear Construction

- Quality is **joined** with health and safety
- Workers tend to read more
- Greater emphasis on gathering evidence for audit trail
- Fitness for purpose is **implicit** – results are the product of analysis

Well designed Instructions increase compliance



1e

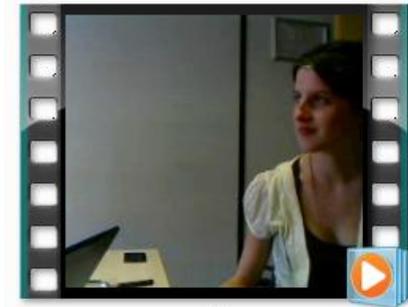


2e



3e

These people are being interviewed to see how well they understand pharma instructions



5



6



7



8



9



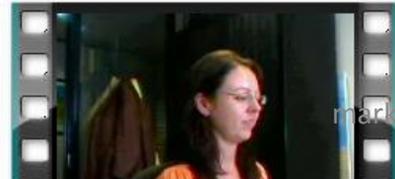
10



11



P1



Patient Information Leaflet

Tambocor XL 200 mg Capsules

Flecainide acetate

I started in Pharma...

Read all of this leaflet carefully before you take this medicine.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or nurse.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.

In this leaflet:

1. What Tambocor XL capsules are for
2. Before you take Tambocor XL capsules
3. How to take Tambocor XL capsules
4. Possible side effects
5. How to store Tambocor XL capsules
6. Further information.

1. What Tambocor XL capsules are for

Tambocor XL capsules belong to a group of medicines called anti-arrhythmics. Anti-arrhythmics work by controlling the rate and rhythm of the heart.

mark.lawrence@isgpil.com

Check with your doctor or nurse before taking Tambocor XL capsules if:

- You have high blood pressure
- You have chest pains (angina)
- You have heart disease
- You have kidney disease or kidney problems
- You have liver disease or liver problems
- You wear a pacemaker.

Tell your doctor or nurse if you are taking any of the following medicines:

- Any other medicine used to treat irregular heart beat (heart arrhythmias) or heart problems. Examples of such medicines include cardiac glycosides, beta-blockers, verapamil or amiodarone
- Medicines to treat high blood pressure
- Medicines used to treat depression (antidepressants), such as tricyclic antidepressants, Prozac, fluoxetine or reboxetine
- Medicines used to prevent epileptic fits (anticonvulsants) such as phenytoin, phenobarbital or carbamazepine
- Medicines to treat mental illness (antipsychotics) such as clozapine



12/10/11

Project Work Instruction: Information for Operatives

Response & Clean Up of Small Scale Mercury Spills

...and applied the methods learned for achieving clarity to nuclear work instructions

Read all of this document carefully before you start work on this task

- Keep this document in a safe place and available while you are working
- If you have any further questions contact your WSO
- This document has been created solely for the task described. Do not apply this to other tasks as this may endanger yourself and others

In this document:

1. The task that this document covers
2. Before you start the procedure
3. Contingency plans
4. Procedure

1. The task that this document covers

This Project Work Instruction (PWI) covers the response to, and clean-up of small scale mercury spills that may occur at various locations at the AWE (A) Site.

#1 of my top 4 rules

1. Choose your medium



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Once upon a time a prince wearing shining armour, rode a horse to a castle to ask the king for the hand of his daughter.

The fairytale version...

Once upon a time (BS ISO 6426-2:2002+A1:2012 Horological vocabulary . Technical and commercial definitions and BS 3937-1:1965. Classification of jewelled horological mechanisms. Lever and pin pallet Calibrated to BS ISO 17514:2004 Time-measuring instruments) **a prince** (genetic lineage DNA test certificate issued by BS EN ISO/IEC 17025:200 accredited laboratory) **wearing shining armour** (Armour must comply with ASTM F2681 - 08. Standard Specification for Body Protectors Used in Equine Racing and riding helmet certified to BS EN 1384:1997 Specification for helmets for equestrian activities) **rode a horse** (Horse must have veterinary treatment certificates and inoculations) **to a castle...**

...the quality version.

This shouldn't be presented as a paragraph. Paragraph equals story. Break it up into a list instead.

Happy Valley Kingdom – Royal Suitor Checklist

- Time measure:** (BS ISO 6426-2:2002+A1:2012 Horological vocabulary . Technical and commercial definitions and BS 3937-1:1965. Classification of jewelled horological mechanisms.)
- Time measure (cont):** Lever and pin pallet Calibrated to BS ISO 17514:2004 Time-measuring instruments)
- Prince:** genetic lineage DNA test certificate issued by BS EN ISO/IEC 17025:200 accredited laboratory)
- Armour:** must comply with ASTM F2681 - 08. Standard Specification for Body Protectors Used in Equine Racing and riding helmet certified to BS EN 1384:1997 Specification for helmets for equestrian activities)
- Horse:** must have veterinary treatment and inoculations

It's much easier to
appreciate and work
with

3 Performance certifications / offsite tests



- **Performance certifications** (e.g. to British or European Standards and as stated in the specification) must be submitted to the Architect.
- If certifications are not available then independent testing of the prototype is mandatory to fulfil the specification requirements.
- Test methods are detailed for each package within the specifications. It is the responsibility of the contractor to assimilate and comply with the methods.



- When testing, the Architect shall be given at least 7 days' notice prior to the erection and dismantling of the prototype construction, as the Architect may elect to observe the assembly and dismantling of the test prototypes.
- The prototypes shall be mounted in test rigs which have the same conditions of attachment and support as elements of the works, with a supporting structure similar in stiffness to that supporting the works.
- Tests shall not be carried out without prior notice of at least 7 days being given to the Architect. Details of the equipment intended for use in the testing process shall be submitted to the Architect.
- The testing must be carried out in the sequence shown in the specification. No test shall be carried out unless all previous tests in the sequence have been passed to the satisfaction of the Testing Authority.



H11.2205 Air Permeability Tests and/or certificates of compliance - Provide actual air leakage results from tests

- System Type EWR-201 full height.



H11.2206 Weatherproofing / Watertightness Tests and/or certificates of compliance

- System Type EWR-201 full height.



H11.2207 Wind Resistance Tests and/or certificates of compliance

- System Type EWR-201 full height.

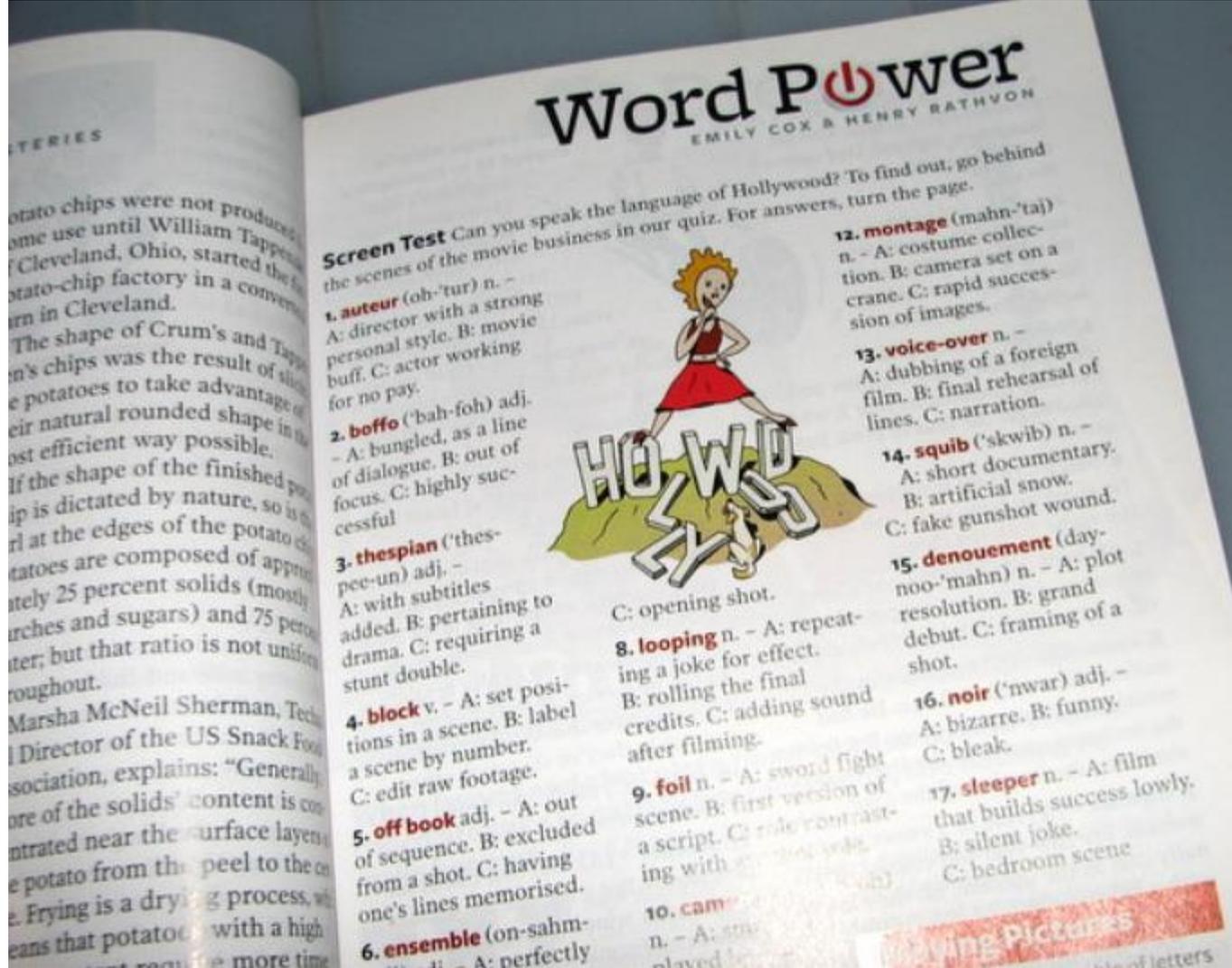


H11.2208 Impact Testing and/or certificates of compliance

- System Type EWR-201 full height.

An example of the guidance documents I produce – I call them ‘quality checklists’,

2. Take care with words



The Readers Digest has the widest readership of any publication. It should be studied carefully by people who write for the general public

Disambiguate
Is that a new
word?

I would dispute the use of 'well
known'

It's a well known Latin compound so
no, it's even older than you are ;)

Well, according to wordcount.org,
'disambiguate' is ranked 75,980 which
means that it appears slightly more
often in sample text than the
following:

Atoning
Unbranded
Retractions
Inefficacy
Shuttlecock

This is an actual
exchange – I used
'disambiguate' in an
email

Atoning
Unbranded
Retractions
Inefficacy
Shuttlecock

It's obviously trendy management speak.

Personally I think that Shuttlecock should find it's way into the management lexicon

your trendy manager!

I've used disambiguate a lot in comments relating to copy editing instructions

And take this example....

You win

The 'winning example' is what follows next...

3. Disambiguate



Name this object...

It is necessary for technical reasons that these warheads be stored upside down, that is, with the top at the bottom and the bottom at the top...

The problem with this text is that it tries to mix instructions and explanations. This leads to confusion.

...In order that there be no doubt as to which is the bottom and which is the top, for storage purposes, it will be seen that the bottom of each warhead has been labelled 'TOP'.

Attributed to British Admiralty, 1960s

4. Use Icons



These people are testing road signs for readability – the road sign is being driven on top of a car at speed towards them to simulate roadway use

SITE SAFETY

All visitors & drivers
must report to site office



Children must not
play on this site



Construction work in progress.
Parents are advised to warn
children of the dangers of
entering this site



High visibility
jackets
must be worn



Report all
accidents
immediately



Danger
Deep excavation



Protective
footwear
must be worn



Danger
Stop. Look. Listen.
Beware of trucks



Safety helmets
are provided for
your safety and
must be worn



No access
for unauthorised
personnel

H&S use iconography well. It's time that Quality moved in on this.

flaticon

No affiliation, it's a
good source of free
icons

The aim of this document

This document provides an 'at a glance' summary of the testing and submittals related to the package. Text is presented in the following formats:



Information

Information provides a short summary of requirements and defines terms used.



Actions

The actions that are indicated in this document have been identified as mandatory and are therefore required for the fulfilment of the contract.



Warnings

Attention is given to requirements that may be onerous or which involve a time-limit. Again, these are necessary for the fulfilment of the contract

Icons work well. They make you forget that you are reading something

3 Performance certifications / offsite tests



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H11.2207 Wind Resistance Tests and/or certificates of compliance

- System Type EWR-201 full height.



H11.2208 Impact Testing and/or certificates of compliance

- System Type EWR-201 full height.

icons are more effective at separating a page than text headers

Well designed Instructions increase compliance

1. **Choose your medium** – try to repeat structure and be aware of paper format
2. **Take care with words** – put unusual words at the end of sentences
3. **Disambiguate** – don't mix instruction and explanation in the same paragraph
4. **Use Icons** – limit these to three or four

**Give me six hours to chop
down a tree and I will spend the
first four sharpening the axe**

Abraham Lincoln

Feel free to get in
touch if you want any
further advice. ML