

An Example of a 25 slide Presentation that lost the

audience, because: (NOTE: this is a completely fictitious subject, authorship and presentation, but there have been attempted Presentations like this at the IEE Holm Conference)

- 1) Too many slides: 25
- 2) Too much information on each slide: no time to read and to listen
- 3) Too much detail: main points lost
- 4) Too many slides that do not add, but detract from the presentation
- 5) Impossible to present all of this in 15 minutes. There will be no time for questions. In fact the talk will go over the 20 minute allotted time: bad manners for the rest of the conference presenters.
- 6) One major purpose of a Conference presentation is to have the question and answer session after each talk

This paper should have been considered a landmark paper on the “Womble” effect in electrical contacts. The paper itself gives new directions for experimental study of this effect and has very detailed experimental results and some interesting discussion and conclusions. A careful study of this paper would take at least 2-3 hours. It is impossible to present this paper in great detail during a 15 minute conference presentation. However, with the example that follows that is what the authors did attempt to do. As you will see there is so much information on most of the slides and they are difficult to read. There is enough information for a 60 minute talk! The audience would soon be overwhelmed and the significance of the paper would be lost. The authors should have arranged their talk to entice the audience’s attention and thus encourage them to read the paper later.

In the second example there is an illustration of how the authors could have arranged a 15 minute presentation which would have given those interested in the audience a general overview of their paper and interested them to read it later.

The original 25 Power-Point presentation as developed by the authors

New Experimental Techniques to Investigate the Womble Effect in Electrical Contacts

Johan Nikita, WPF Corp
Wooja Kintoon, Gupta University

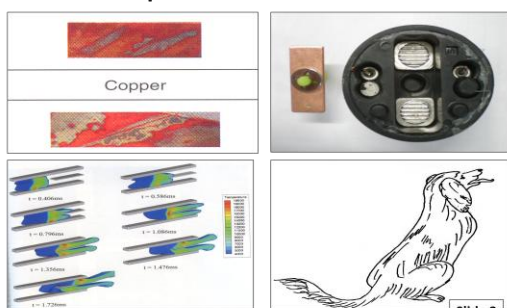
WPFC

Slide 1

Slide 1

- Good
- Some presenters like to place a logo. Just place it here on the title slide and nowhere else. Logos on every slide are a distraction
- This will be up for session chair's introduction. Move immediately to slide 2

Examples of the Womble Effect



Copper

Slide 2

Slide 2 (1min 30sec)

- Unnecessary, eliminate
- It doesn't say anything about the present research findings
- E-C researchers will be familiar with the "Womble" effect

Presentation Outline

- Introduction
- **Experimental Technique 1 (ET1)**
 - Performance
 - Experimental Results
- **Experimental Technique 2 (ET2)**
 - Performance
 - Experimental Result
- **Discussion**
 - Womble effect
- **Summary and Conclusions**

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Slide 3

Slide 3 (30sec)

Total (2min)

- This seems to be conventional, but it takes up about 4% of the time allotted
- It can be eliminated
- Certainly eliminate the logo

Former Womble Effect Measurements

There have been many experimental techniques to measure the Womble effect in electrical contacts. Most, however give only general data and not specific details of the time related phenomena and the effect of long durations of the effect. Two examples of former experimental systems are shown below

A Picture of a Former Experimental System (1)

A Picture of a Former Experimental System (2)

The experimenters that used these systems were not really able to correlate their data with the real effects of the experimental process. Certainly there was no evidence that their results had any meaning to real electrical contact applications.

Slide 4

Slide 4 (2min)

Total (4min)

- Too much information, the audience while trying to read this will not really concentrate on what the speaker is telling them

The Experimental Set-ups in this Paper

One mechanical device developed to evaluate the Womble effect uses an innovative periodic torquing oscillation system (TOS)

A Picture of the TOS

A second device (ET1) has also been developed which only gives periodic wombles to the contact structures this is driven by magic.

A Picture of the ET1

Each experimental system is able to simulate actual field experience of the Womble phenomenon in electrical contacts and delineate the actual degradation effects.

Slide 5

Slide 5 (2min) Total (6min)

- Eliminate this slide, the experimental setups are discussed later in the presentation
- Wastes 2minutes of the total presentation time (13%)

In This Presentation

1. We will present a new mechanism which gives only periodic wombles to electrical contacts (ET2)
2. The relative wombles between the male and female contact systems and we will discuss the Womble degradation effects by the pseudo atmospheric day to day changes using ET1 and ET2.
3. ET1 uses the traditional Womble degradation mechanical system with the added advantage that it is driven by magic.
4. ET2 is a new system that produces the Womble effect by a state of the art extraterrestrial radio source.
5. The experimental conditions introduce two motions which are triangular and rotational, two levels of contact force in actual practical contact structures with a few and many contact pairs
6. We thus obtain optimal wobble effects like these:

Picture of Womble effect 1

Picture of Womble effect 1

Picture of Womble effect 1

Slide 6

Slide 6 (2min) Total (8min)

- Too much information plus 3 pictures
- 10 – 12 text lines maximum
- If adding a picture reduce the number of text lines
- Already used ½ presentation time

Presentation Outline

- **Introduction**
- **Experimental Technique 1 (ET1)**
 - Performance
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WPCF

Slide 7

Slide 7 (30sec) Total (8min 30sec)

- Eliminate, there is no need to repeat this

Experimental Technique 1

Picture of EDC1

In order to wobble the contacts in the range required, the wobble mechanism has special wobble springs that use the magic input to tightly control the input and output

Experimental Technique 1 Actuator

Detailed Picture of the experimental contact structures

In this example a male and female contact structures are shown. The female parts are completely fixed and the male parts are mounted below them and wobble by the magic forces.

The wobble driven by magic between the fixed and the wobble contacts. Any displacement is measured by eyeballing it using a graded graduate student who hopes by this to receive a PhD eventually

Slide 8

Slide 8 (2min) Total (10min 30sec)

- Too much information on this slide
- Pictures are too small
- Limit to one larger picture and only up to 8 lines of text

Slide 9 Experimental Performance (EC1)

Below shows the input triangular and rotational input voltages to the contacts. W shows measured wombles of the lower male contact. X shows displacement in one direction Φ_1, Φ_2, Φ_3 show the rotation wobble effects

Although the data shows the characteristic Womble characteristics of magic oscillations, they also show that Wombles could affect the input set up. It can be seen that the wombles are driven not only by magic but also by the experimental method.

- Too much information on this slide, 11 text lines and 3 figures
- Pictures are too small
- The fonts too small on the figure labels too small and on the axes

Materials used in the Experiments

The contacts are shown with the male contact under stress and the female contact perfectly at ease with no Womble effect present

The Womble forces on the contacts range between 1W per contact pair to 10W per contact pair. The contact surfaces are plated onto stainless steel spring leaves

Here the womble forces are set at 3W to 10W per contact pair, but the time varying wombles are not even dent

Here lower womble forces are used and the variation in the data indicates some time varying effects

Slide 10

Slide 10 (1min30sec) Total (14min)

- Too much information on this slide, 15 text lines and 3 pictures
- Pictures are too small

Results Slide 11

Experimental Conditions

1. The contacts were connected in pairs
2. Current used: 15mA
3. Womble frequency: 100Hz
4. Womble wave forms: triangular and rotational
5. Womble Force: 3W and 10W

At 10W the contacts begin to show the Womble effect as shown on the left hand figure and after more operations show the extreme Womble effect in the middle of the figure.

With a Womble force of 3W in the right hand figure the voltage fluctuations are minimal

From these data we predict that the Womble effect is minimized between 3W and 10W in this experiment. Unfortunately this does not really equate to real life contacts found in commercial designs. Thus we continued to examine the effects at Womble forces between 3W and 10W.

Slide 11 (2min) Total (16min)

- Too much information on this slide, 14 text lines and 2 pictures
- Pictures are too small
- All the Fonts too small

Results

There seem to be lower limits to Womble forces and to Womble motions as we predicted

1				
2				
3				
4				
5				
6				

The pictures do not show clearly the effects that we have shown

The results are completely different from those of previous researchers

Slide 12

Slide 12 (3min) Total (17min)

- Too much information on this slide it would be difficult for the speaker to present this slide in 3 minutes
- Pictures and fonts are much too small
- This slide would be overwhelming for the audience.

Slide 9 (2min) Total (12min 30sec)

Presentation Outline

- **Introduction**
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Slide 13

Slide 13 (30sec) Total (17min30sec)

- Eliminate

Experimental Technique 2

Picture of EDC2

Picture of EDC2

6 Small Photographs showing various aspects for Experimental Technique 2

Picture of EDC2

Picture of EDC2

Picture of EDC2

Picture of EDC2

The system not only uses magic, but also relies upon extraterrestrial forces which can be summored by ESP
The Womble force and motion is measured using a micro-ruler
These are measured in real time once the magic and extra terrestrial forces are invoked.

Slide 14

Slide 14 (2min30sec) Total (20min)

- Too much information on this slide it would be difficult for the speaker to present this slide in 3 minutes
- Pictures and fonts are too small
- This slide would be overwhelming for the audience.

Experimental Performance (EC2)

Shows all the input triangular and rotational input voltages to the contacts. All the motions are less than 1% of the required motion to obtain any meaningful result

Picture of EDC2

Picture of EDC2

Picture of EDC2

Picture of EDC2

Picture of EDC2

Picture of EDC2

Picture of EDC2

A number of small Figures with very small captions showing the triangular motion and the Womble effects Experimental Technique 2

Slide 15

Slide 15 (3min) Total (23min)

- Too much information on this slide it would be difficult for the speaker to present this slide in 3 minutes
- Pictures and fonts are too small
- This slide would be overwhelming for the audience.

Materials used in the Experiments

Detailed view—micro-ruler used for the additional measuring, also used to check and show from

Crucial spacers—used to ensure that the spacing of small components is correct

Breadboard with integrated circuit components, resistors, capacitors and other components

Circuit board with integrated circuit components and other components

Resistor distribution for power distribution

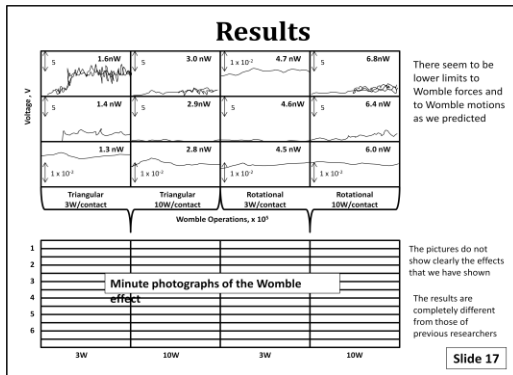
Womble setup and other components

Micro-ruler and other small components

Slide 16

Slide 16 (1min) Total (24min)

- Too much information on this slide it would be difficult for the speaker to present this slide in 1minutes
- Pictures and fonts are too small



Slide 17 (3min) Total (27min)

- Too much information on this slide it would be difficult for the speaker to present this slide in 3 minutes
- Pictures and fonts are way too small

Presentation Outline

- **Introduction**
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Slide 18

Slide 18 (30sec) Total (27min30sec)

- Eliminate

Discussion

- For each result the larger Womble force and the larger Womble motion are not related
- The smaller Womble amplitudes in the triangular motion are larger than those with the oscillating motion
- The cause is the difference between the purely magic system and the system that employs both magic and extraterrestrial forces.
- Therefore when setting up the practical contact devices it requires that both force systems are taken into account
- The Womble force of 3W means that more experiments need to be performed

Slide 19

Slide 19 (1min30sec) Total (29min)

- 12 lines under the title is the maximum for the audience to read and also listen to the speaker
- A good example

Discussion, Continued

- The minimum Womble amplitudes are larger in the EC1 than they are in EC2 except when the extraterrestrial force fluctuated to zero.
- We think that this resulted from the variation in the world wide web at the time the experiments were performed.
- We think that EC1 had an inherently stiffer Womble force, but that overcame the other forces inherent in EC2.
- For EC1 we have no idea of what is happening, so we cannot give a coherent explanation of the phenomena.
- What is the world coming to?

Slide 20

Slide 20 (1min30sec) Total (29min)

- 12 lines under the title is the maximum for the audience to read and also listen to the speaker
- A good example

Discussion, Continued

- The minimum Womble amplitudes are larger in the EC1 than they are in EC2 in all cases
- We think that EC1 had an inherently stiffer Womble force, but that overcame the other forces inherent in EC2. Also the casing material could have had an effect
- For EC1 perhaps the contacts were more rigid
- We believe that the magic forces and the stiffer contact members can explain the differences in the data from EC1 and EC2
- Maybe the Womble effect is also affected by the well known Fretting phenomena.

Slide 21

Presentation Outline

- Introduction
- Experimental Technique 1 (ET1)
 - Performance
 - Experimental Results
- Experimental Technique 2 (ET2)
 - Performance
 - Experimental Result
- Discussion
 - Womble effect
- Summary and Conclusions

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Slide 22

Summary

1. There are Womble effects in electrical contacts using both experimental systems EC1 and EC2
2. The Womble degradation is affected by both the Womble force, the Womble amplitude and the Voltage waveform.
3. These give rise to different accelerations which affect the Womble motion
4. The forces from EC2 actually transfer more Womble effects than do those from EC1.
5. The forces from EC1 being only by magic cannot compete with those of EC2 which combine magic with extraterrestrial forces.
6. The experiments from EC1 seem to correlate more closely with field experience of the Womble effect in electrical contacts

Slide 23

Conclusions

1. There are minimal Womble amplitudes that can cause contact resistance variations in closed electrical contacts
2. It is possible to correlate the input voltage waveforms, the Womble forces and the Womble amplitudes to determine the lowest changes in contact resistance
3. By reviewing this paper in detail the reader can work these out for him/herself.

Slide 24

Slide 21 (1min30sec) Total (29min)

- 12 lines under the title is the maximum for the audience to read and also listen to the speaker
- A good example, but a maximum of 2 slides should have been used

Slide 22 (30sec) Total (29min30sec)

- Eliminate

Slide 23 (1min) Total (30min30sec)

- Eliminate: this slide is superfluous. Its message should have been stated in the "Discussion"

Slide 24(30sec) Total (31min)

- 9 lines under the title, a large font
- A excellent example of an audience friendly power point slide

**Thank you for your
efforts in attempting
to absorb so much
detail in such a short
time!!**

Slide 25

Slide 25

Total (31min)

- NO COMMENT!!

An example of how the Power-Point Presentation could have been made in 11 slides (NOTE: this is not meant to be a template)

- 1) The number of slides: 11
- 2) About 1 minute 30 seconds for each slide
- 3) Limited information on each slide: gives time to read and to listen to speaker
- 4) Only essential main points on each slide
- 5) Allows speaker time to elaborate main points
- 6) There are no slides that detract from the main theme of the presentation
- 7) Easy to presents in 15 minutes and allows time for questions: an essential part of a conference presentation
- 8) It will keep the Conferences schedule of 20 minutes per speaker

New Experimental Techniques to Investigate the Womble Effect in Electrical Contacts

**Johan Nikita, WPF Corp
Wooja Kintoon, Gupta University**

WPFC

- Good, large fonts
- Some presenters like to place a logo. Just place it here on the title slide and nowhere else. Logos on every slide are a distraction
- This will be up for session chair's introduction. Move immediately to slide 1

Presentation Outline

- **Background & Purpose**
- **Experimental Technique 1 (ET1)**
 - Experimental Results
- **Experimental Technique 2 (ET2)**
 - Experimental Result
- **Discussion**
- **Conclusions**

Slide 1

Slide 1 (30sec)

Total (30sec)

- This seems to be conventional, but it takes up about 4% of the time allotted
- It can be eliminated

The Former Womble Measurements

- **Do not give specific details of what the Womble effect really is**
- **The experiments are only short term**
- **There is no correlation with real electrical contact applications**

Slide 2

Slide 2 (1min30sec)

Total (2min)

- Only the major points on the slide
- Large font, easy to read and listen
- Allows the speaker to elaborate if needs be

The Purpose of the Present Study

- Analyze the Womble in detail
- Present 2 new Womble measurement techniques
- Introduce new possible Womble motions
- Show the criteria where the Womble effect is minimized
- Show correlation with actual field experience of the Womble effect

Slide 3

Slide 3 (1min)

Total (3min)

- Good, large fonts
- Easy to read and listen to the presenter at the same time
- Highlights the major purpose of the study
- Allows time for the presenter to elaborate some details

Experimental Parameters

Slide 4

- Contacts connected in pairs
- Current: 15mA
- Womble frequency: 100 Hz
- Womble waveforms: Triangular & Rotational
- Womble force: 3W & 10W
- Materials: Plated Craxium on SS springs

Slide 4 (1min)

Total (4min)

- Good, large fonts
- Easy to read and listen to the presenter at the same time
- Highlights the major parameters for this study
- Allows time to elaborate if needed

Experimental Technique 1 (ET1)

Large diagram or picture of ET1 with labeling in large font

- Female contacts fixed, male contacts on Womble springs
- Womble effect driven by magic
- Displacement measured by eyeballing

Slide 5

Slide 5 (1min30sec) Total (5min30sec)

- One large picture or diagram of the apparatus with large font labels
- There will be time for the speaker to give more detail, if needed
- Only the major points on the slide
- Large font, easy to read and listen

Results ET1

Slide 6

Axis with large font

Axis with large font

Axis with large font

Axis with large font

- Typical result one showing the Womble effect and the other a minimal effect
- Womble effect minimal between 3W and 10W
- The Womble effect driven by magic mechanism and experimental set up
- Triangular and rotational waveforms gave different results
- Continued the experiment with the 2nd experimental mechanism

Slide 6 (2min)

Total (7min30sec)

- Good, large fonts
- Easy to read and listen to the presenter at the same time
- Highlights the major purpose of the study
- Allows time for the presenter to elaborate some details
- Only ½ allotted time spent

Experimental Technique 2 (ET2)

Slide 7

Large diagram or picture of ET2 with labeling in large font

- Female contacts fixed, male contacts on Womble springs
- Womble effect driven by magic & extraterrestrial forces
- Displacement and forces measured in real time by micro-ruler

Slide 7 (1min30sec)

Total (9min)

- One large picture or diagram of the apparatus with large font labels
- There will be time for the speaker to give more detail, if needed
- Only the major points on the slide
- Large font, easy to read and listen

Results ET2

Slide 8

Axis with large font

Axis with large font

Axis with large font

Axis with large font

- Confirms the general Womble effects shown in ET1
- Requires both magic and extraterrestrial forces to give consistent data
- The Womble effect from ET2 gives results consistent with field data
- Triangular and rotational waveforms now give similar results

Slide 8 (2min)

Total (11min)

- Good, large fonts
- Easy to read and listen to the presenter at the same time
- Highlights the major purpose of the study
- Allows time for the presenter to elaborate some details
- Leave a good time for the Discussion of the data

Discussion

- The larger Womble force and larger Womble motion not related
- Smaller triangular Womble motions are larger than rotational ones
- Magic and extraterrestrial forces in EC2 give data similar to field studies
- Thus both force systems need to be used in laboratory experiments
- Minimal Womble effect in EC1 smaller than in EC2 except when extraterrestrial forces \sim zero

Slide 9

Slide 9 (1min30sec)

Total (12min30sec)

- Good, large fonts, 10 lines
- Easy to read and listen to the presenter at the same time
- Highlights the major discussion points for this study
- Allows time for the presenter to elaborate some details

Discussion (Continued)

- We have no idea of the Womble mechanism that develops in EC1
- The world wide web may have had an influence
- Womble force of 3W shows where more experiments need to be performed
- EC1 had stiffer Womble forces which may explain the data difference seen in EC2

Slide 10

Slide 10 (1min30sec) Total (14min)

- Good, large fonts, 8 lines
- Easy to read and listen to the presenter at the same time
- Highlights the major discussion points for this study
- Allows time for the presenter to elaborate some details

Conclusions

1. There are minimal Womble amplitudes that can cause contact resistance variations in closed electrical contacts
2. It is possible to correlate the input voltage waveforms, the Womble forces and the Womble amplitudes to determine the lowest changes in contact resistance
3. By reviewing this paper in detail the reader can work these out for him/her self.

Slide 11

Slide 11(1min)

Total (15min)

- Good, large fonts, 9 lines
- Easy to read and listen to the presenter at the same time
- Highlights the major conclusions obtained from this study

Thank you

