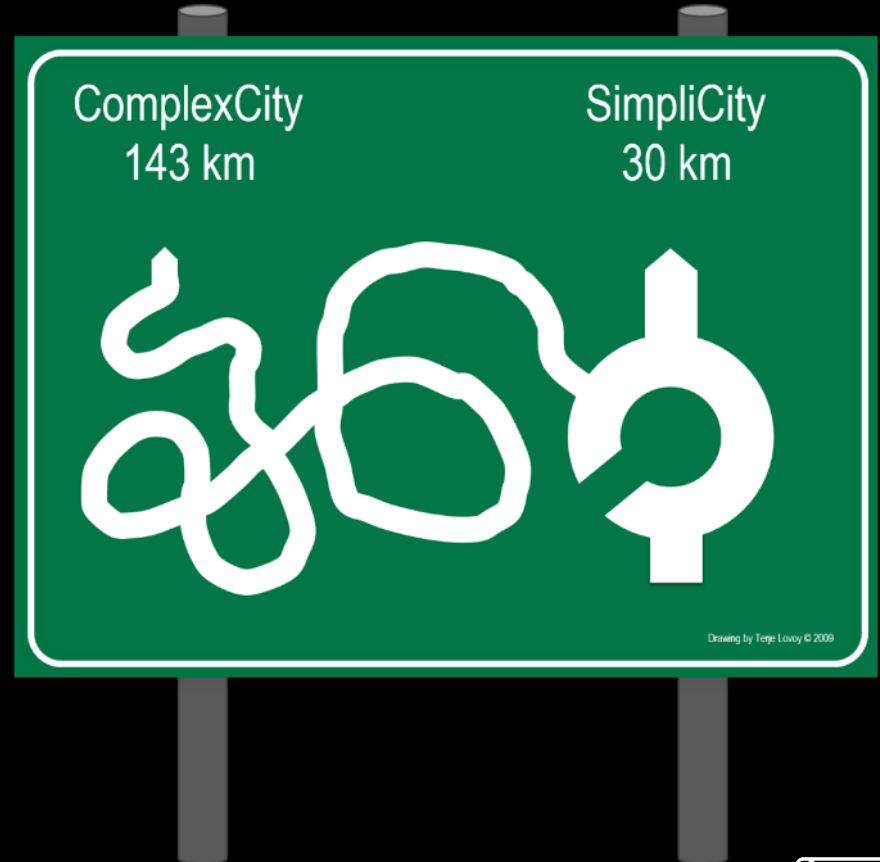


SMS Simplification and Improvement

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Complex



Clear



Jon Lovoy
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Typical Before and After Example



N
A
V
I
G
A
T
I
O
N



48.939 words

17.235 words

65% reduction



Shipping



Oil and Gas



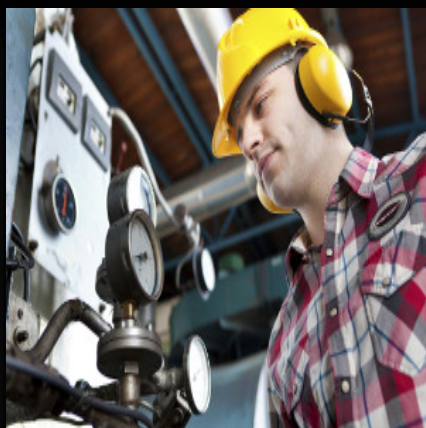
Sub-Sea



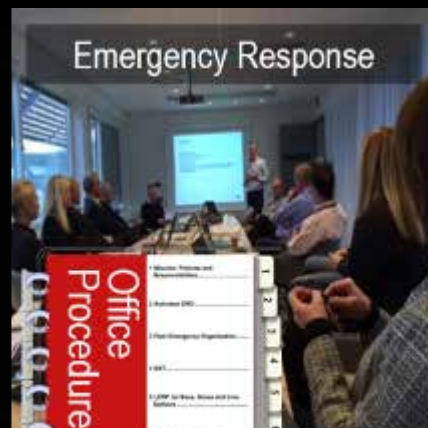
Rail



Medical



Factories



Emergency



Administration

Airline Safety

Hull Losses per Million Departures

30-40



1960's

0,32



2015



Human
Element



Documentation



CRM



Technical

Dallas Times Herald

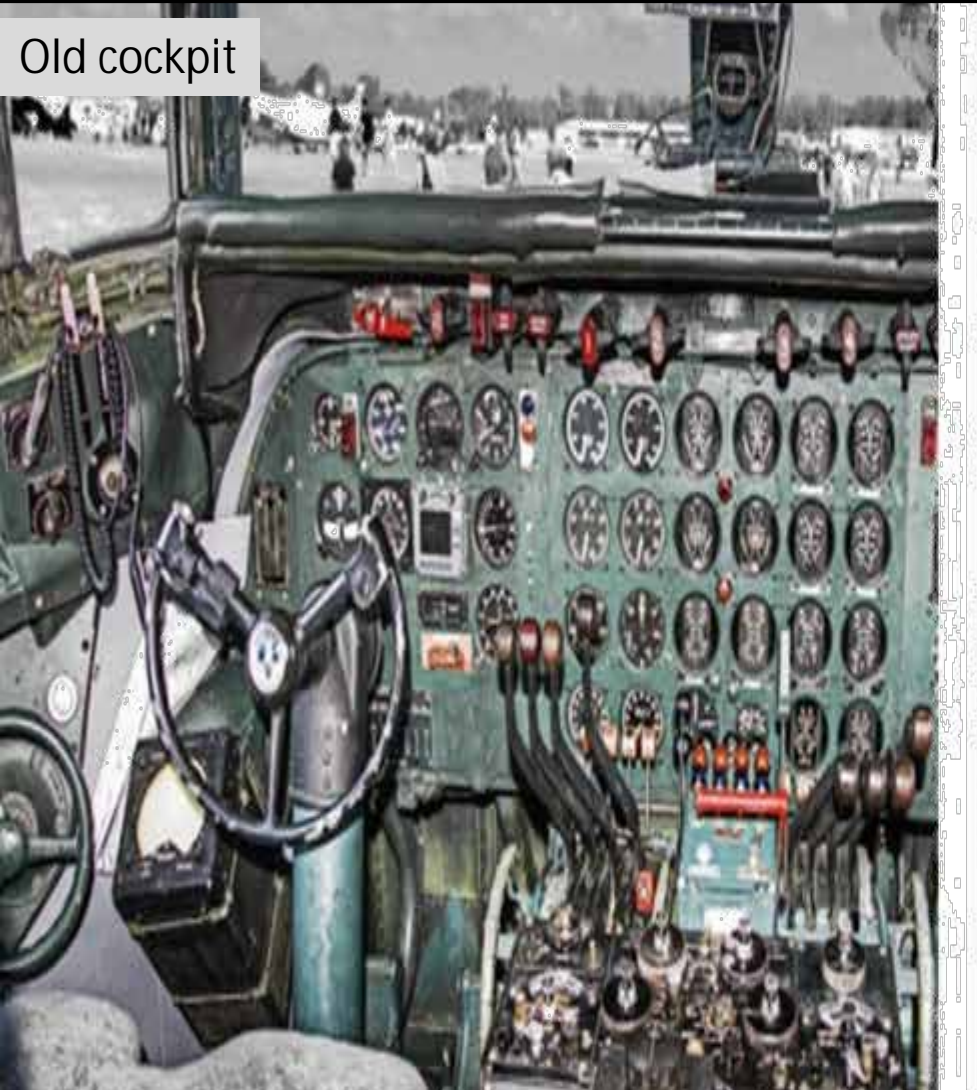
Miracul
3 die in fiery De





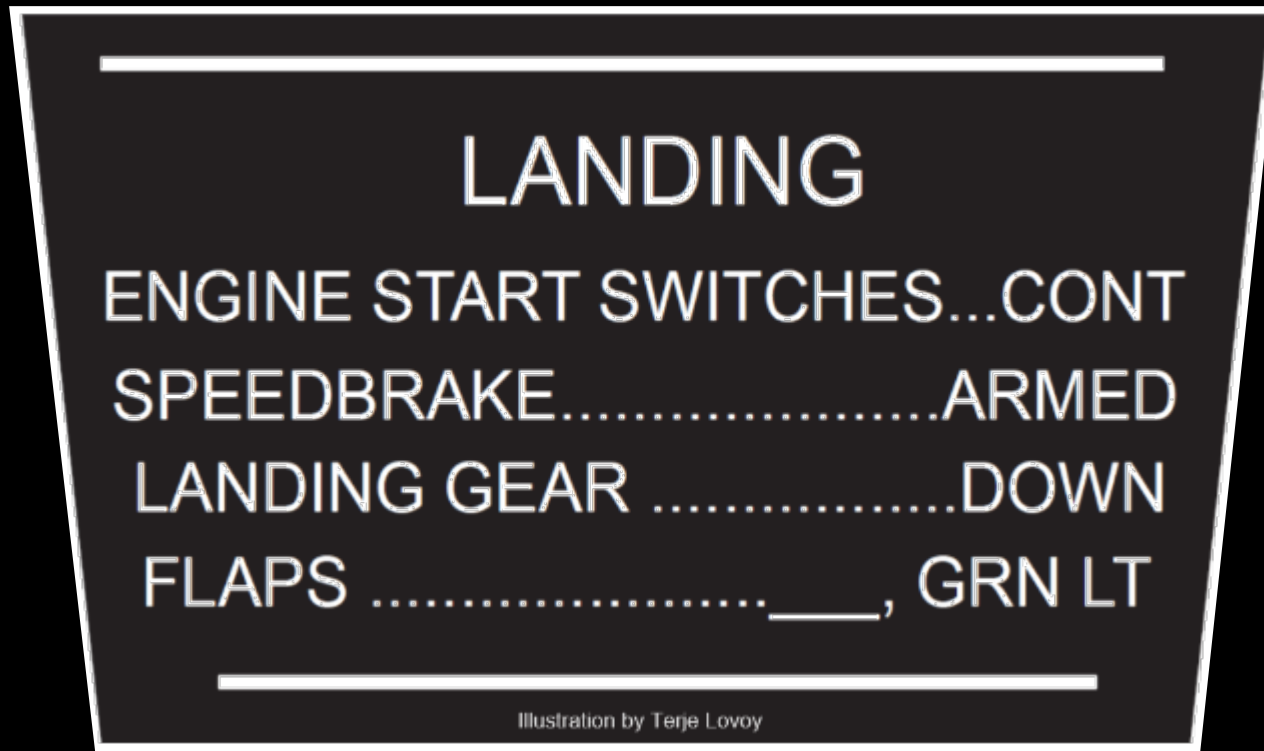
Photo source Wikipedia

Technological Improvements



The equipment was simplified but not the procedures

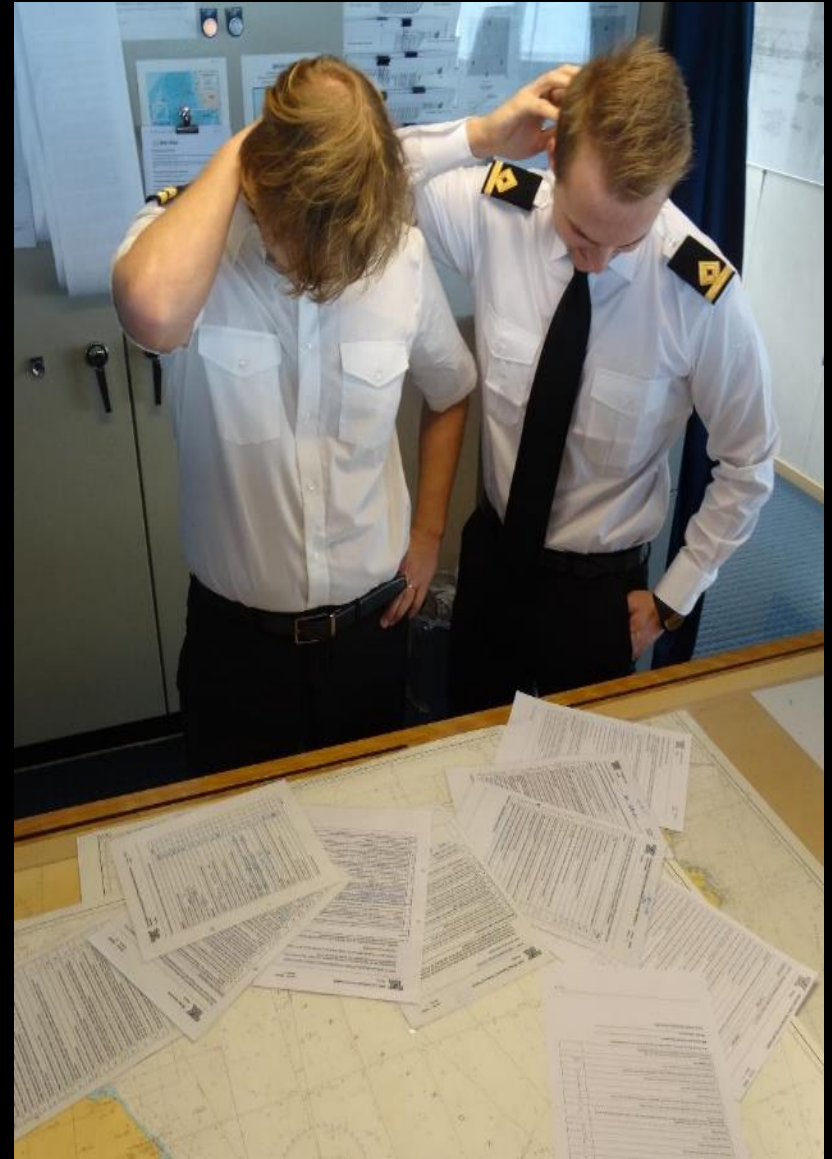
The Solution Was to Simplify



Typical modern airline checklist

SMS Analysis

- Difficult language
- Must read several times
- Difficult to find what you need
- Not following workflows
- Must transfer knowledge verbally



What Caused these Problems?

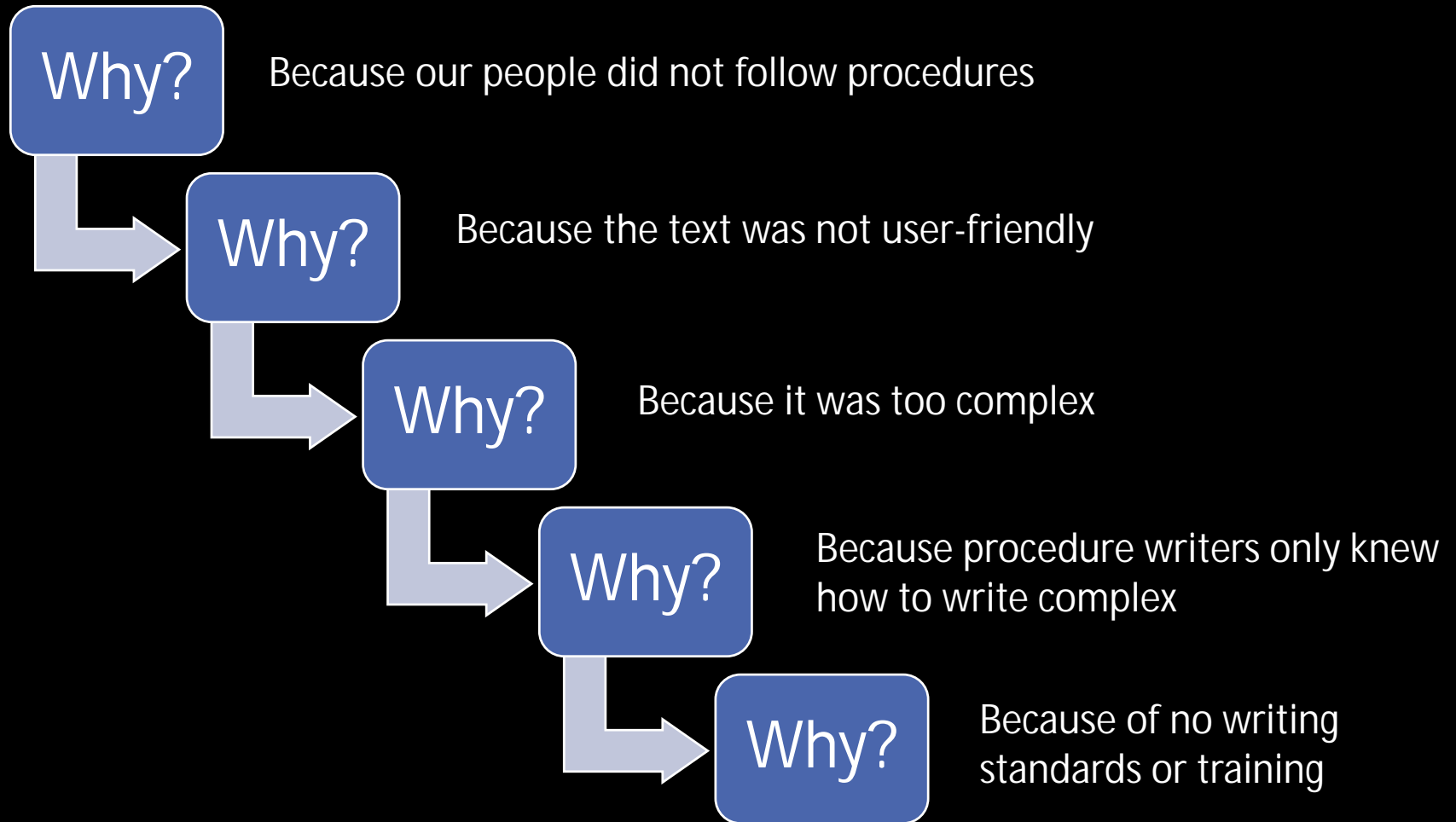
Typical answers:

- Result of ISM, ISO and other standards
- Government and client demands
- Adding but never removing info
- Too much info forced upon us

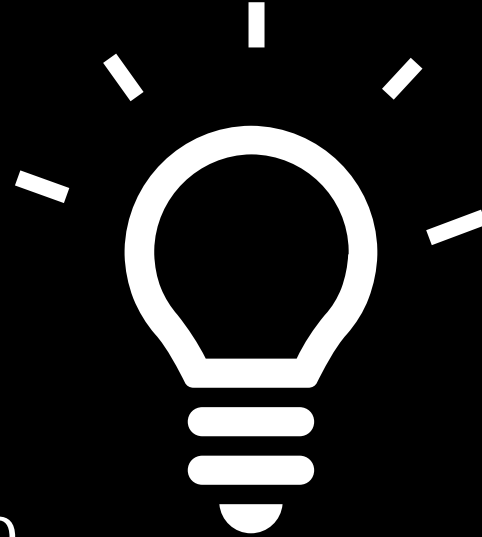


Blame others?

The 5 Why's Root Cause Analysis



Conclusion

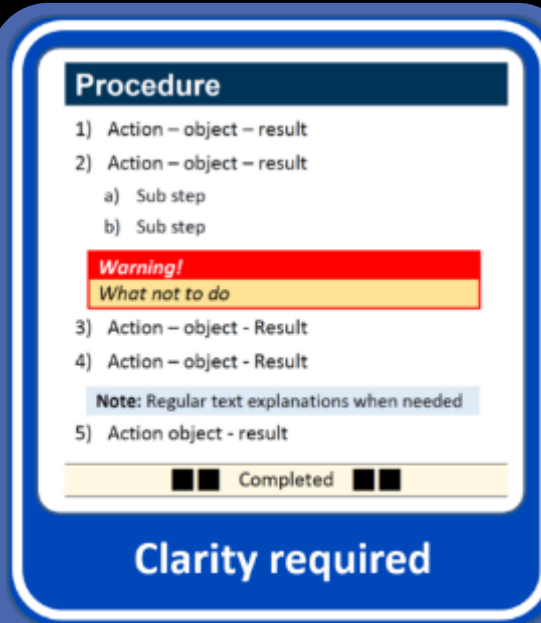


..the problem is not too much info

..it is the way the info is presented



Style



Layout



Structure



Bla bla bla bla bla bla bla bla!
Bla bla bla bla bla bla bla bla!!!
Bla bla bla bla bla bla bla bla!!
Bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla
bla bla bla bla bla bla bla bla!
Bla bla bla bla bla bla!!!



Procedures are like people,
some talk a lot but say very little.

We can present the same things
in a complex or simple way.

$$\frac{12}{18} = \frac{2}{3}$$

Commence = Start

Complex	Simple
Give consideration to	Consider
During the period of	During
A number of	Some
Give the recognition to	Recognize
Is concerned with	Concerns
Because of the fact that	Since

22 words

6 words

70 % reduction

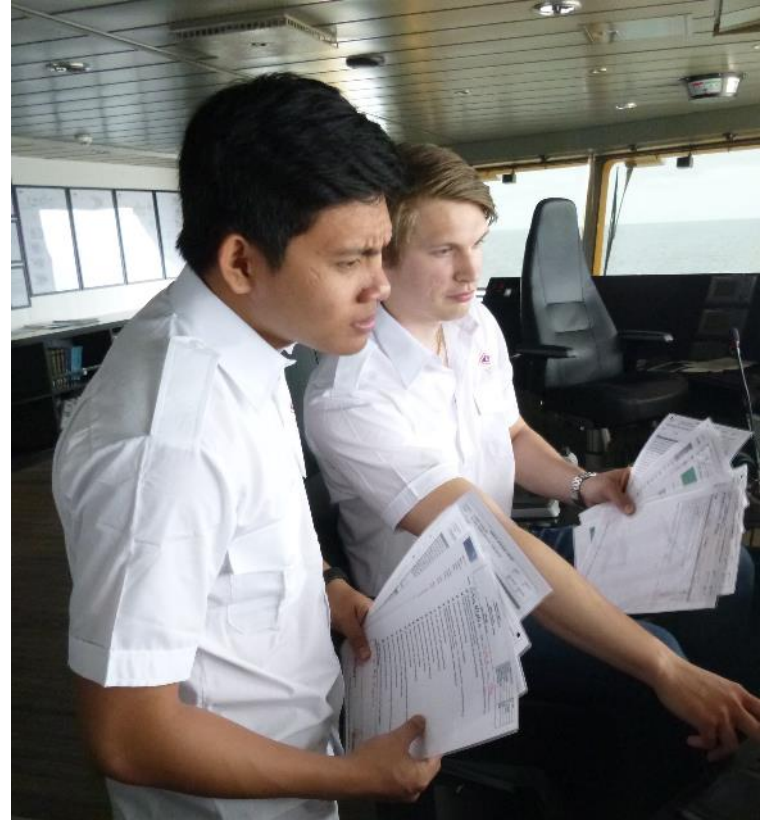
From Lovoy simple word dictionary www.lovoy.info

Use Everyday Words

- Make use of
- Assist
- Abundant
- Commence
- Acquire
- Carry out
- Numerous
- Transmit
- Use
- Help
- Many
- Begin, start
- Get
- Do
- Many
- Send

Use Simple Every Day Words

- Short everyday words are easy to understand.
- Use them as much as possible.
- Complex words takes more time even for native speakers.



Bad Habits are Hard to break

- Subconsciously using too difficult words
- It is like becoming speed blind
- We do not notice it



Elucidate = explain or make clear

Why do people use a
complex word when a simple
word can do the job?

Will using big words make
you sound smarter?

Research from Princeton University by Professor Daniel Oppenheimer



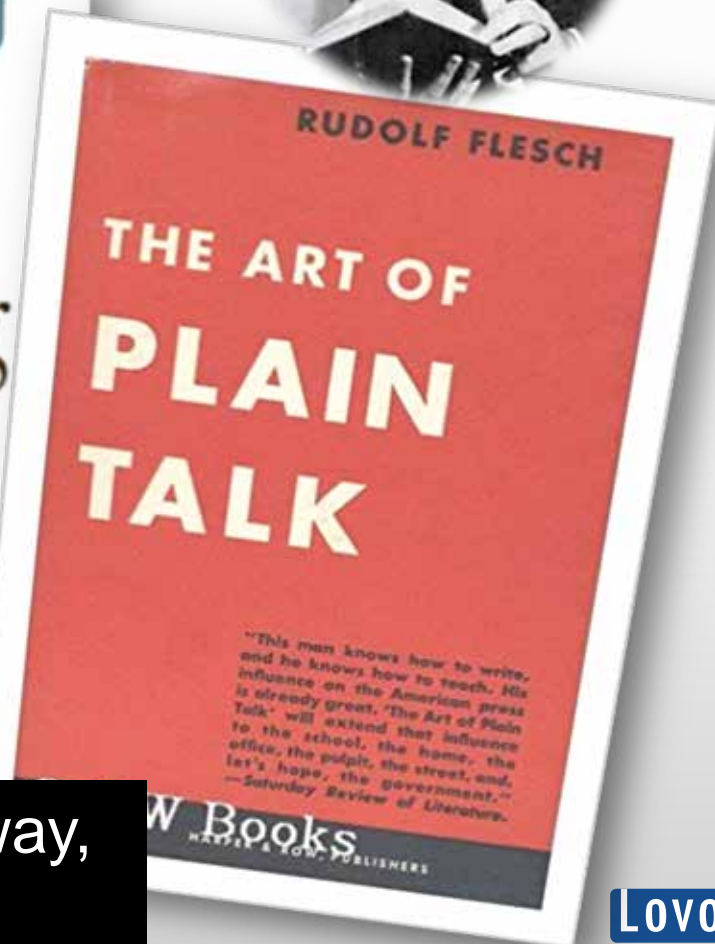
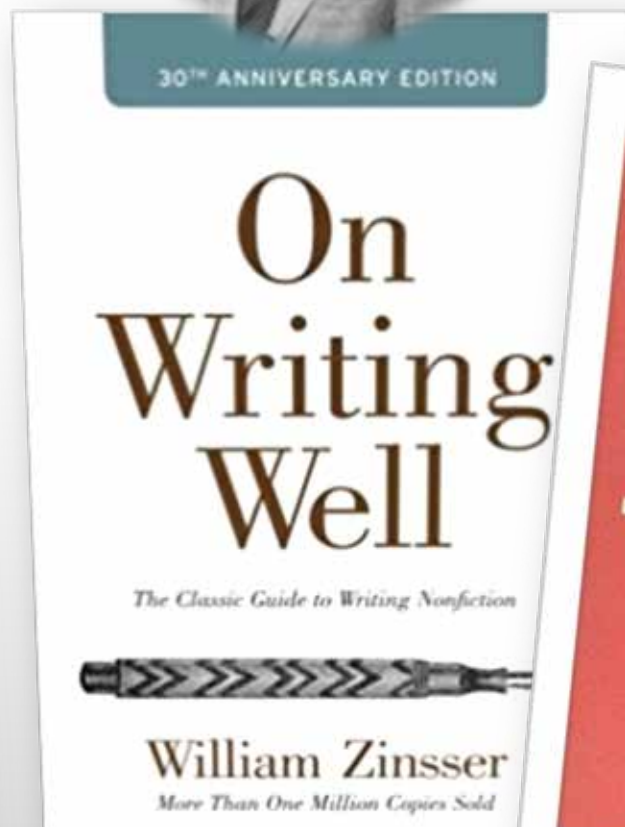
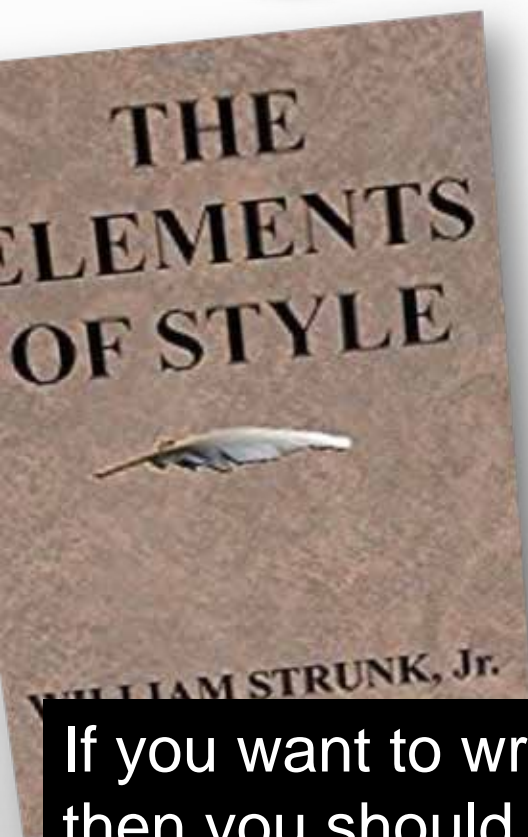
Does increasing the complexity of text succeed in making the author appear more intelligent?

Complex texts were:

- Harder to read
- Rated more negatively

Increasing text complexity does not make the author seem more intelligent.

Writing too complex text makes
readers judge you as less intelligent.



If you want to write in an impressive way,
then you should listen to the experts!

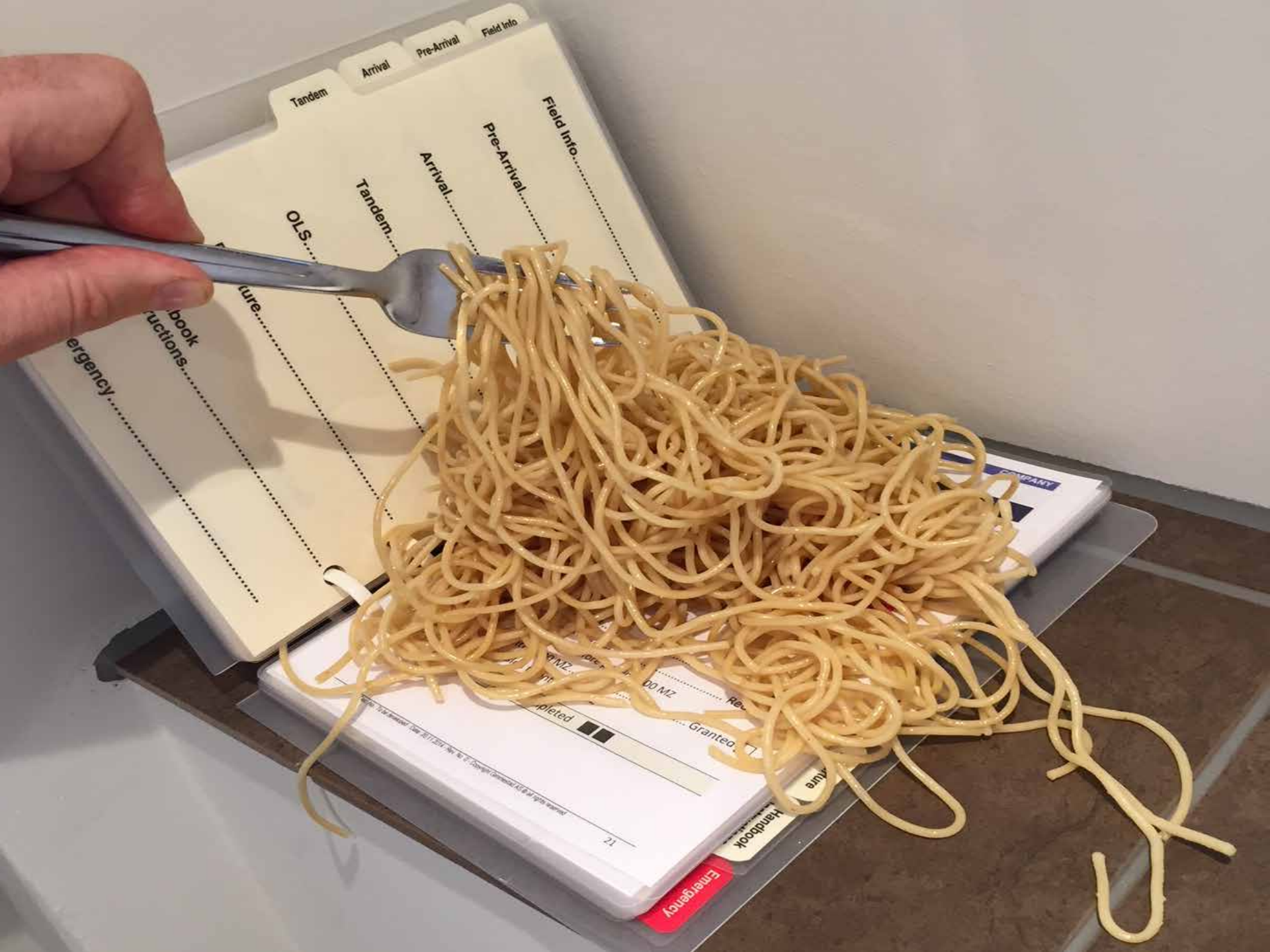
“When a sentence is made stronger, it usually becomes shorter.”

William Strunk

“Omit needless words..”

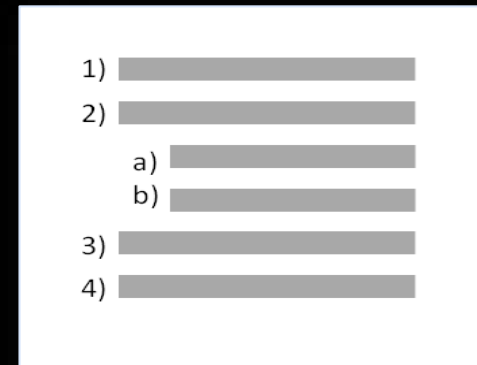
William Strunk

Round ~~in shape~~





Plain text



Steps



Step by step workflow



Use of Portable Water Fire Extinguisher Bottle Procedure

When using a portable water fire extinguisher bottle, always initiate the spraying by directing the outlet nozzle head of the extinguisher bottle directly towards the base of the burning fire source. This is to be done first before the handles is to be squeezed together, after squeezing the handles and hitting the core of the fire source with water, the water comes in contact with the flames and the heat will subsequently be removed from the fire.

Carry out the spraying pattern in a horizontal direction from left to right or right to left. To commence extinguishing of a fire, the index finger must be inserted into the handheld water fire extinguisher's metal ring that is coupled to the metal safety splint which then is to be pulled out firmly and completely.

⌘ Pull the pin

- Aim the nozzle at the fire

ž Squeeze the handles

- Spray from side to side

Stilted Text



- You look down on the reader
- Use third and fourth person
- Overly formal
- Not effective if you want the reader to respect your words

You, We and Us

Candidates with questions should contact the HR department. (8 words).

Contact us if you have questions (6 words).

IUMI 2016



- Why – because they did not follow the error
2. Why – because the text was not
3. Why – because it was too co
4. Why – because procedure w
how to write concise





What Do the Governments Say

Public Law 111–274
111th Congress

An Act

To enhance citizen access to Government information and services by establishing that Government documents issued to the public must be written clearly, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Plain Writing Act of 2010”.

SEC. 2. PURPOSE.

The purpose of this Act is to improve the effectiveness and accountability of Federal agencies to the public by promoting clear Government communication that the public can understand and use.

Plain Language definition:

- Short simple words
- You, We and Us style
- Write active sentences

- EU
- Nordic countries
- UK
- Australia
- Canada
- New Zealand

An iceberg floating in a dark blue ocean under a dark sky. The tip of the iceberg is visible above the water line, while the much larger, jagged base is submerged below. The water is a deep, dark blue, and the sky is a dark, cloudy blue.

Checklists

Procedures

Two types of checklists:

- 1) Tasks we do often and know well
- 2) Task we seldom do



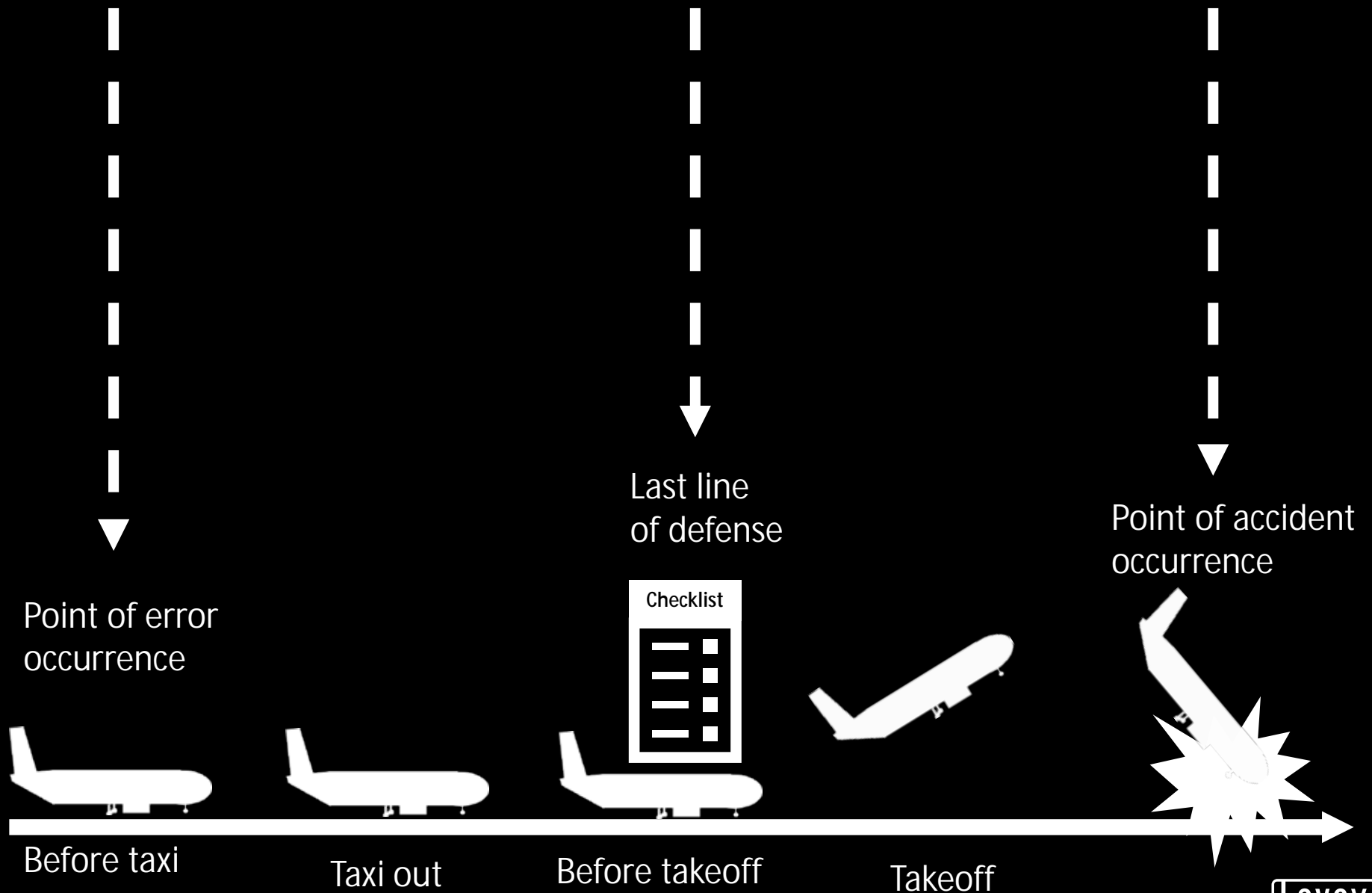
The diagram features a horizontal white arrow pointing to the right, representing a timeline. Two vertical dashed white lines extend downwards from the timeline. The left line has a white downward-pointing arrowhead at its base, and the right line also has a white downward-pointing arrowhead at its base. A yellow rectangular box is positioned between these two vertical lines, centered vertically. The text 'Window of checklist opportunity' is written in black inside this yellow box. Below the left vertical line, the text 'Point of error occurrence' is written. Below the right vertical line, the text 'Point of accident occurrence' is written. The word 'Timeline' is written in white at the bottom left of the diagram.

Window of
checklist opportunity

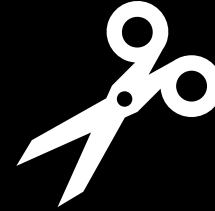
Point of error
occurrence

Point of accident
occurrence

Timeline



Checklist

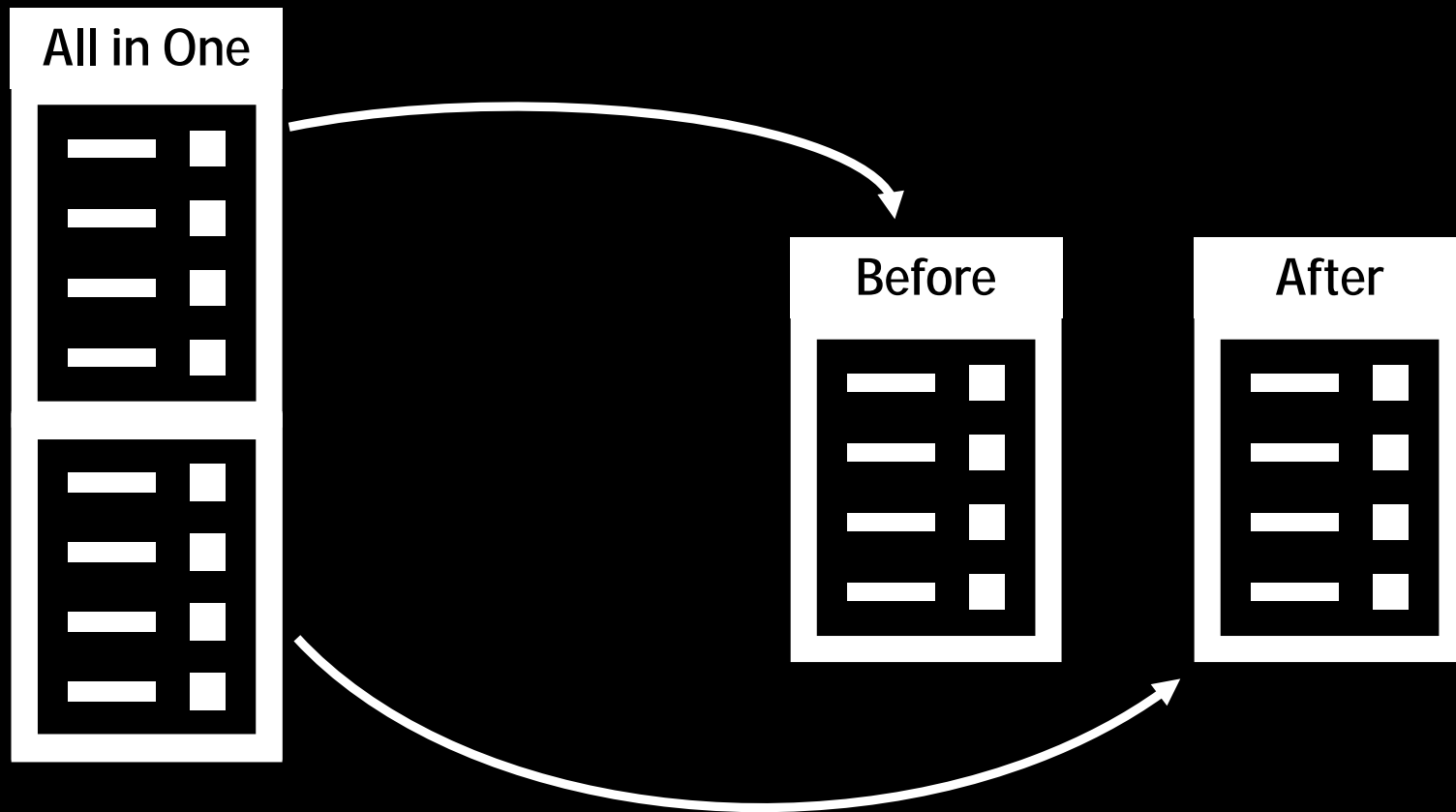


Point of error
occurrence



Point of accident
occurrence





Break up checklists based on risk

Procedure (before)

1. Adjust seat
2. Fasten seatbelt
3. Adjust mirrors
4. Verify parking break on
5. Start engine
6. Check instruments

Verbs

- Always first
- Imperative (do style)

Checklist (after)

1. Seat.....Adjusted ☐
2. Seatbelt.....Fastened ☐
3. Mirrors.....Adjusted ☐
4. Parking break.....Verified on ☐
5. Instrument.....Checked ☐

Verbs

- At the end
- Past tense

We do not use question words or question signs in checklists

Navigation Handbook



Intro

Passage
Planning

Departure

Sea
Passage

Arrival

Mooring
Anchoring

Difficult
Conditions

Other
Operations

Introduction

Passage Planning

Departure

Sea Passage

Arrival

Mooring & Anchoring

Difficult Conditions

Other Operations

Illustration by Terje Lovoy

Old text

TUBE BENDING AND CUTTING

Cutting of tubes shall be executed using an approved type of tube cutter. After cutting the ends shall be dressed with the appropriate belling tool to ensure that a restriction has not been introduced (both I.D and O.D. of tubes shall be deburred after cutting). Saw cuts shall not be made. Blow through the tube as a final cleaning with compressed air (shavings that are left behind can cause turbulence and possibly leaks in sensitive downstream equipment).

77 Words

New text

Tube Bending and Cutting Procedure

Approved personnel shall do this procedure.

- 1) Select approved tools

Warning!

Do not cut with saws.

- 2) Cut the tube
- 3) Prevent restrictions by dressing ends with belling tools
- 4) Deburr I.Ds. and O.Ds.
- 5) Blow-through with air-pressure

Note: Shavings can cause turbulence and sensitive equipment-leaks.

Caution: *Do not hammer or use force that can damage tubes.*

- 6) Pressurize and bend slowly

■■ Completed ■■

21 Washed old words

+ 35 New details

= 56 Words

Note: Word count is of core text – not headers and footers.

Systems-Based Safety Approach has Plateaued..

SAFETY MANAGEMENT 2.0



..we must look for new ways to drive further safety gains.

Key Performance Indicators

Average Words per Sentence (AWS)

Percent Passive Sentences (PPS)

More info , videos and case studies at:

<https://lovoy.info/>

terje@lovoy.info