



Supporting  
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Aviation



# 4<sup>th</sup> National Just Culture – Judiciary and Aviation Days

## **Safety and Ethics:**

*Where does safety end and ethics begin?*

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NETWORK  
MANAGER





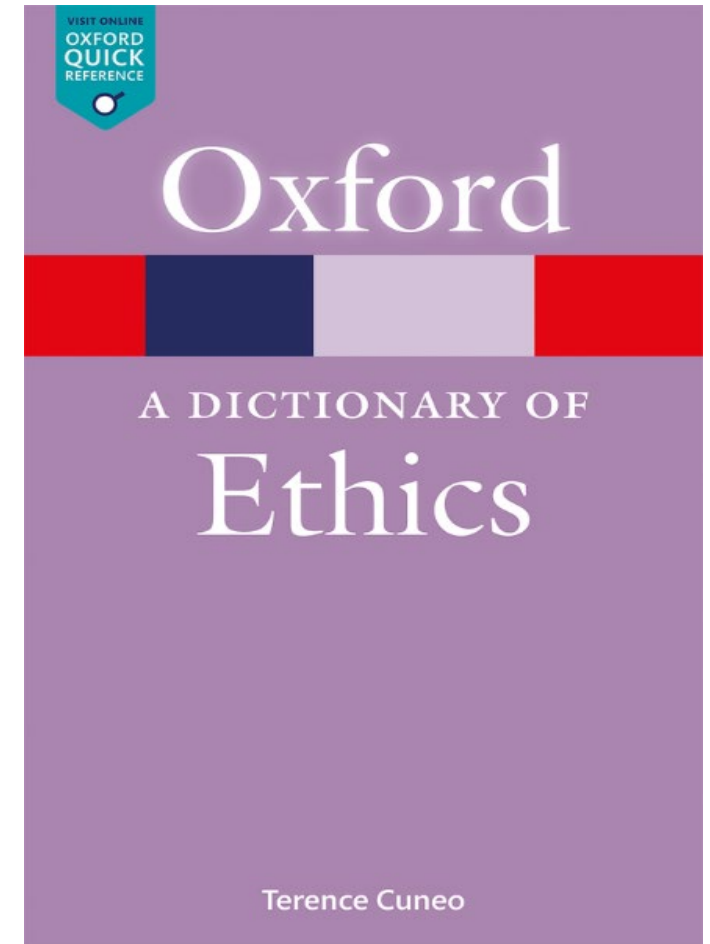
# What are Ethics/ética ?

*From Oxford English and Spanish Dictionary, Thesaurus*



- Moral principles that govern a person's behaviour or the conducting of an activity;
- The branch of knowledge that deals with moral principles;

*“Ethics is what you do when no one else is watching”*





# Kohlberg's Theory of Moral Development

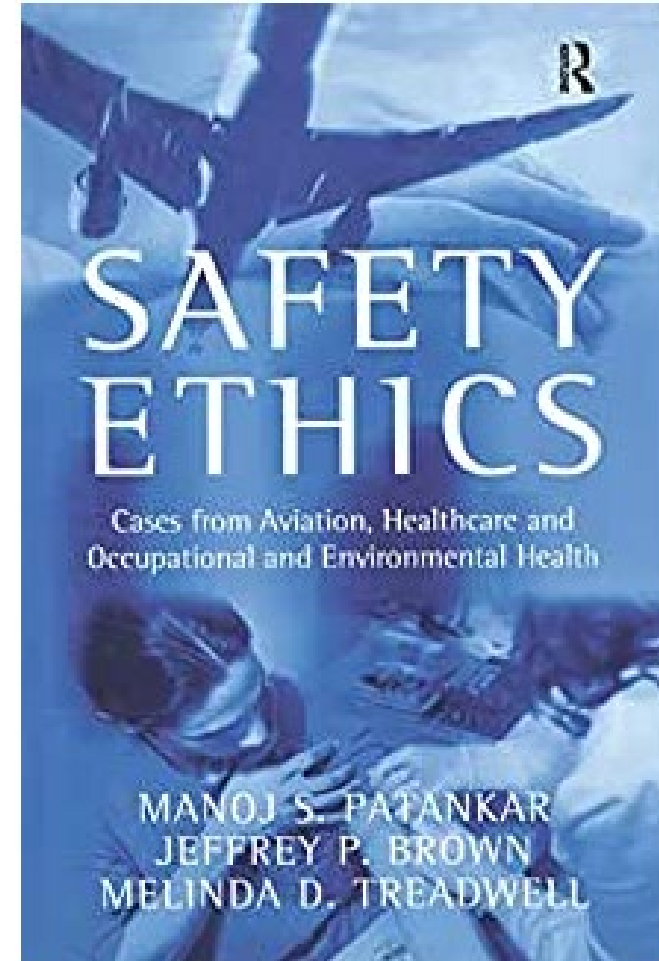
(Extract from "Safety Ethics – Cases from Aviation, Healthcare & Occupational & Environmental Health" by Patankar, Brown & Treadwell)



When presented with an ethical dilemma, people respond in different ways.

Their responses can be categorised into three levels according to the primary criterion in making decisions:

- Self Interest (Level 1);
- Conformity to one's society or peer group (Level 2), or
- Principle of Respect (Level 3).

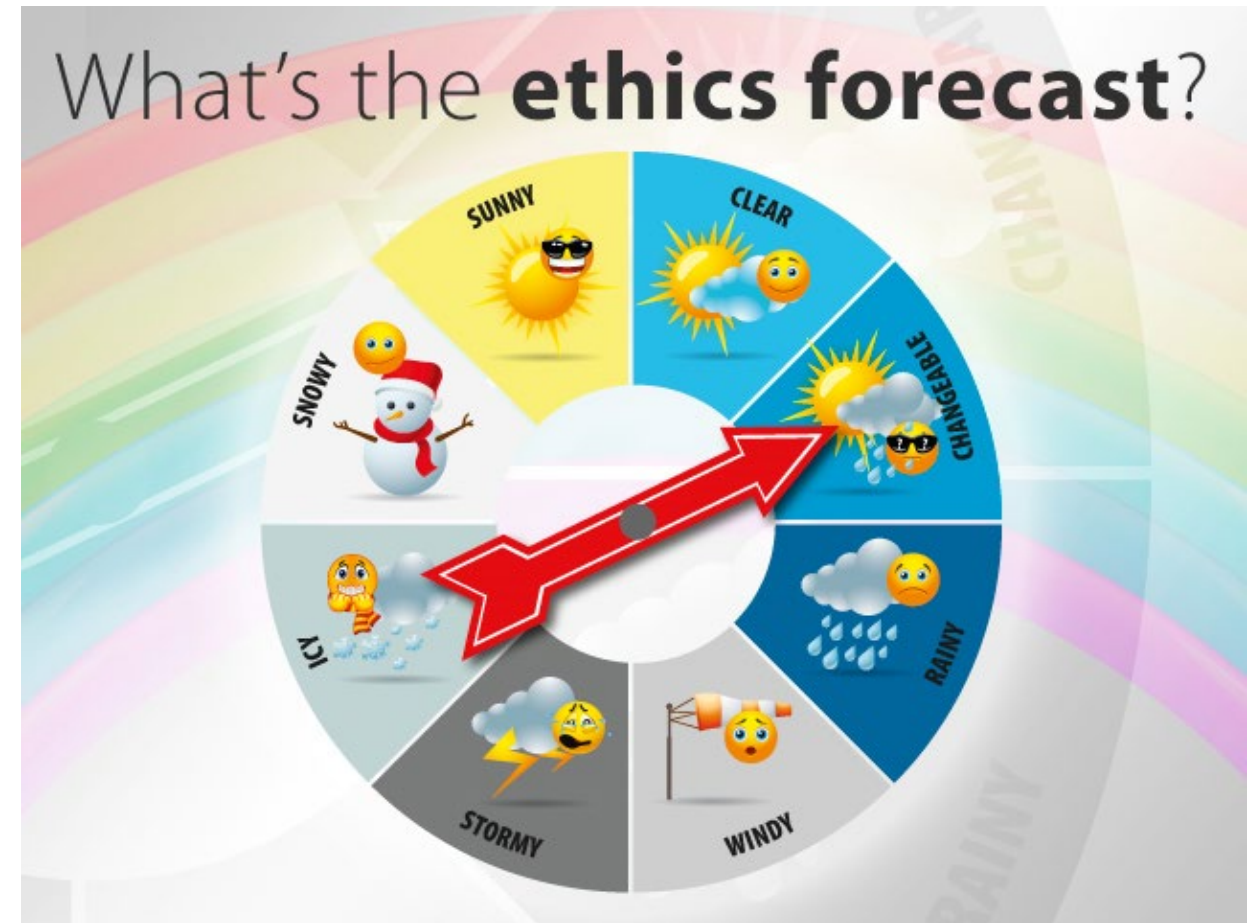




# Where does Safety end and Ethics begin?

You will be presented with a scenario

- What moral or ethical issues does this scenario bring to mind?
- What can we learn about where safety ends and ethics begins?
- Is there anything else that this example triggers as regards enhancing 'safety ethics' in the air and on the ground?.





# An aircraft maintenance experience...

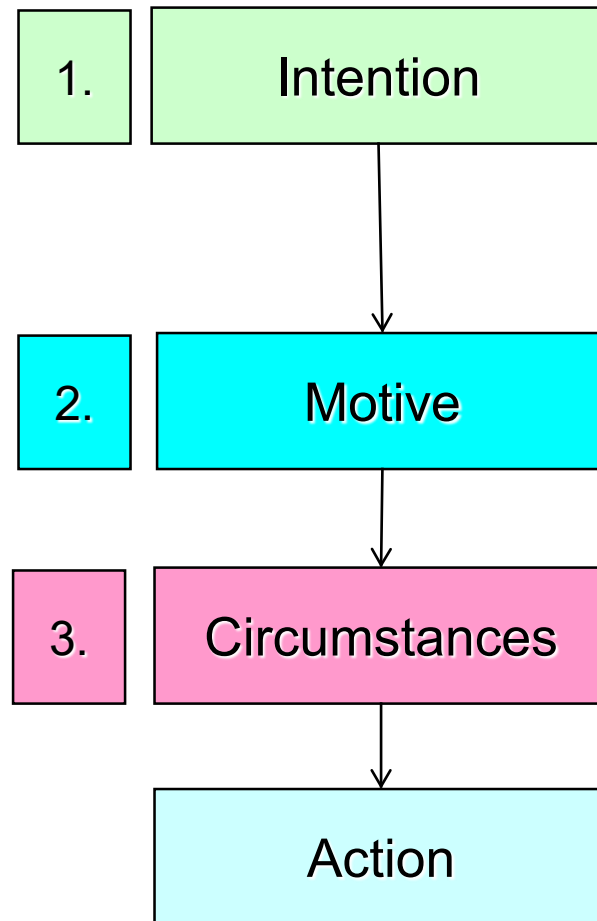
“An Aircraft Maintenance Technician (AMT) is asked to sign-off a maintenance action that has not been performed. His supervisor assures him that the maintenance action is not safety critical and will be taken care of at the next line station. It would be a personal favour if the AMT could sign it off now and let him meet his on-time departure target.”

The supervisor says:

***‘You take care of this one and I’ll take care of you’.***



# The Moral Decision-making Process



## What?

Measure the intention of what is being asked or done against the principle of respect. If the intent is morally good, then examine the Motive;

## Why?

Ascertain why it is being asked or done. If the motive is also good, then consider the circumstances;

## Justified or not?

Determine if the circumstances warrant the action;

The decision-maker accepts responsibility for the action.



# Analysis of Response of AMT scenario - using Kohlberg's three-level framework

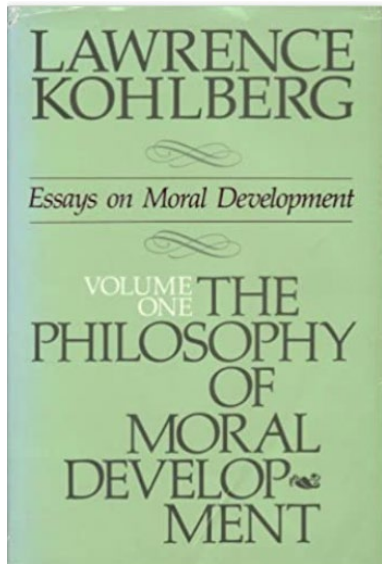
- **Level 1: Self-Interest**

If our subject AMT were to be a Level 1 decision-maker, he is likely to respond in one of the following two ways:

(a) he is likely to say that **‘signing an aircraft off without performing the maintenance action is a federal offence and I will not do it’** or

(b) he is likely to sign-off the aircraft in order to avoid the implied punishment for not complying with the supervisor’s ‘request’.

In either solution, the action is motivated by the Principle of Self-interest of preventing pain whether from legal prosecution or from the supervisor or from the supervisor’s punitive treatment.







# Analysis of Response of AMT scenario - using Kohlberg's three-level framework

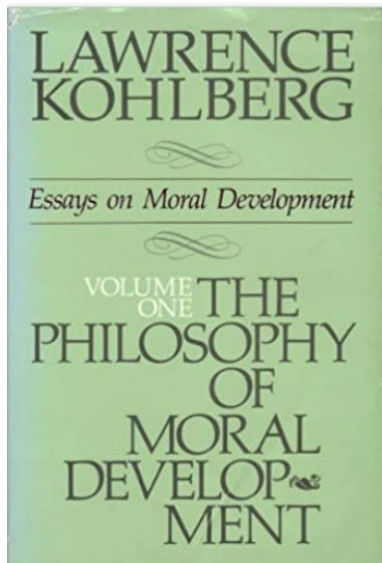
- **Level 2: Conformity to One's Society**

If our subject AMT were to be a Level 2 decision-maker, he is likely to respond in one of the following two ways:

(a) he is likely to **consult with his peers and determines that it is important for him to stand-up to the supervisor** because otherwise he would not be accepted in the AMT community at that line station he would be marked as 'company man' or

(b) he is likely to consult with his peers and determine that there is an 'A-List' of AMTs that this supervisor favours, if he wanted to move ahead in this company, he needs to oblige and sign-off the aircraft.

In either event, the action is motivated by the Principle of Conformity to One's Society where the individual is simply trying to fit in.







# Analysis of Response of AMT scenario - using Kohlberg's three-level framework

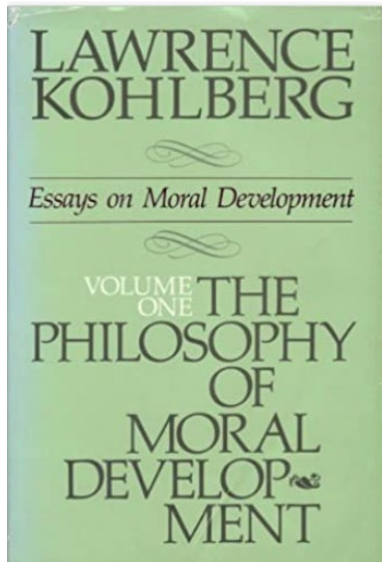
- **Level 3: The Principle of Respect**

If our subject AMT were to be a Level 3 decision-maker, he is likely to respond by saying that he would not sign-off the aircraft without performing the maintenance because:

(a) **it is disrespectful of the legal and moral responsibility placed on him** by the flying public when he earned his Aircraft Mechanic Certificate from the Federal Aviation Administration and

(b) if he were to be a passenger on this aircraft, he would expect that other AMT's would be true to their **professional integrity**.

Therefore, in this case, the AMT action is motivated by the Principle of Respect.





# Characteristics of Level 3 decision-makers

Any similarities & differences with aviation professionals ?

- Strong professional knowledge and skills:
  - They possess strong technical knowledge in their area of expertise and they have strong practical skills in their domain. In short, they are respected by their peers for their technical proficiency;
- Acute sense of personal security:
  - They have confidence in their ability to seek other employment or other careers if they were to lose their job. They also tend to have strong support from their family and friends to do the right thing.



# My other experience is from Cyber domain

## Are Ethics Relevant as well ?

- If you saw a bug in a friend's code.
- Would you tell the manager?
  - Even if it cost their job?
  - Even if it set project back 6 months?



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# My other experience is from Cyber domain

## Are Ethics Relevant as well ?

- Professional code of conducts (ACM, IEEE, etc)
- ACM (Association for Computing Machinery) Code of Ethics.
  - <https://www.acm.org/code-of-ethics>
- Agile Software manifesto who inspired the Just Culture Manifesto
  - <https://agilemanifesto.org/>
  - [https://www.skybrary.aero/index.php/Just\\_Culture\\_Manifesto](https://www.skybrary.aero/index.php/Just_Culture_Manifesto)

### Preamble

#### 1. GENERAL ETHICAL PRINCIPLES.

1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

1.2 Avoid harm.

1.3 Be honest and trustworthy.

1.4 Be fair and take action not to discriminate.

1.5 Respect the work required to produce new ideas, inventions, creative works, and computing artifacts.

1.6 Respect privacy.

1.7 Honor confidentiality.

#### 2. PROFESSIONAL RESPONSIBILITIES.

2.1 Strive to achieve high quality in both the processes and products of professional work.

2.2 Maintain high standards of professional competence, conduct, and ethical practice.

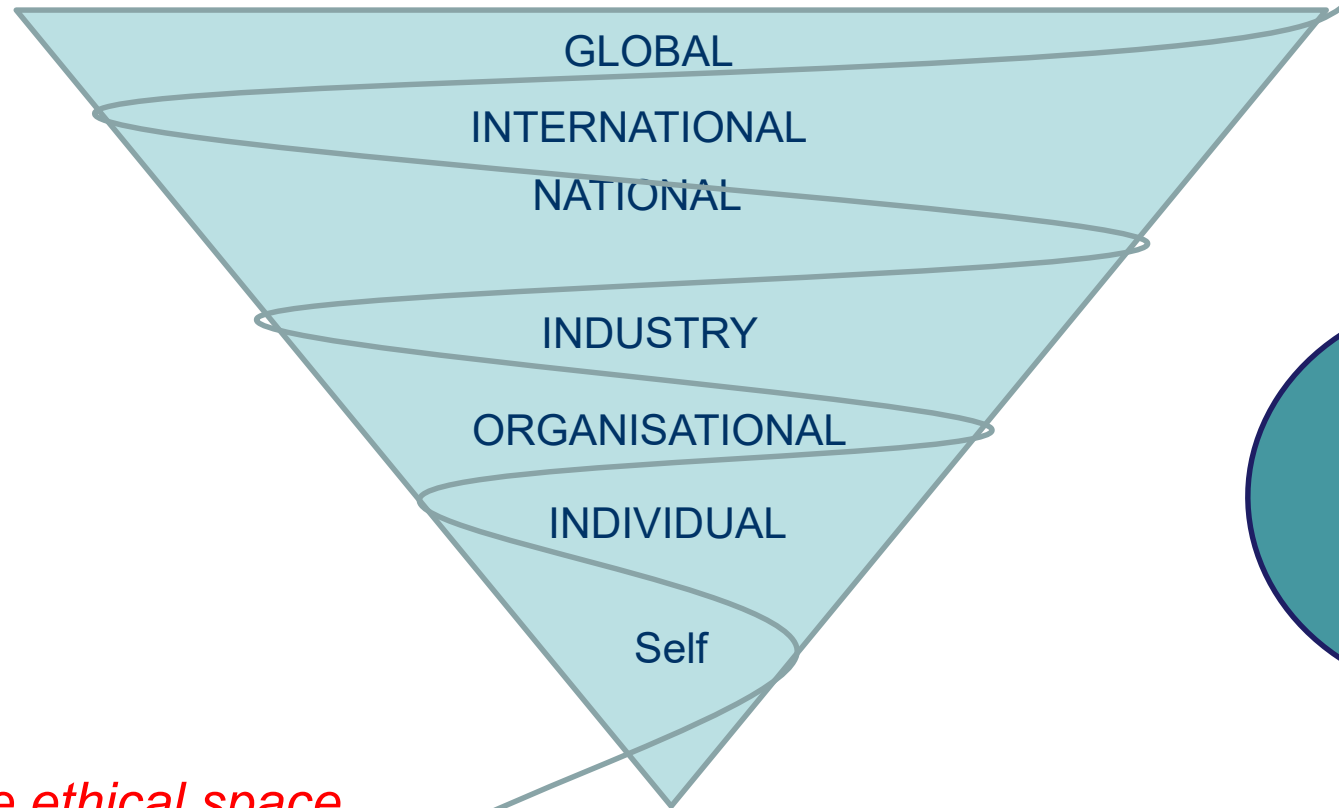
2.3 Know and respect existing rules pertaining to professional work.

2.4 Accept and provide appropriate professional review.



(1.2.3...)

**1- Make space for ethics**



**2- Use Mediation to enable ethical space**

