

Plagiarism, copyright infringement and intellectual property

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SUMMARY

As part of their work for the Federation, the executive board, standing committees, ICAO representatives and other volunteers working for IFATCA are routinely required to conduct research and write working papers on topics of interest to the membership and the directors. This implies sourcing information from scientific publications, governmental portals, and grey literature, among other materials. If not referenced properly, the use of such sources may pose serious concerns with respect to copyright infringement and intellectual property violations. This working paper will propose a way forward to protect the Federation from possible lawsuits resulting from such violations.

1. INTRODUCTION

- 1.1. As part of their work for the Federation, individuals working for IFATCA are routinely required to conduct research and write working papers. Information is usually gathered from scientific publications, governmental portals, and grey literature, among other materials. While it is understood that it is often impossible to write an entire working paper without referring to external sources, their appropriation, without sufficient and adequate referencing may expose the Federation to lawsuits related to copyright infringement and intellectual property violations.
- 1.2. This working paper will first define the following terms: plagiarism, copyright and copyright infringement, and intellectual property. The difference between all these terms will then be explained. Following this, different strategies will be presented to avoid infringements to copyrights and intellectual property. The roles and responsibilities, as well as the consequences of not abiding to a proper use of sources and referencing (what falls outside the scope of "fair use") will be presented. The paper will conclude by proposing amendments to the IFATCA blue book, in the form of a new chapter on plagiarism, copyright and intellectual property, as well as a proposed new policy.

2. DISCUSSION

2.1. Definitions

The difference between plagiarism, copyright infringement and intellectual property may be subtle, but it is nonetheless essential to understand what each of these terms imply in terms of obligations and consequences, when it comes to legal and ethical implications regarding the use of third-party sources.

2.1.1. Plagiarism

Plagiarism can be understood as the use of somebody else's work, concept(s) or idea(s) without giving them credit for said work (Bytescare, 2023; Das, 2023; Arnold & Levin 2021). Put simply, the author plagiarising is presenting their work as if it was original, its own work (University of Illinois in Chicago [UIC], 2023a). Plagiarism is not illegal, in the sense that it does not violate any law (UIC, 2023a; Das, 2023; Arnold & Levin 2021). However, it is an ethical issue, and usually it has serious implications in the academic world (Das, 2023; Arnold & Levin 2021). It is a violation of academic and intellectual integrity, and it applies to all types of media (written, electronic, visual and audio) (Bytescare, 2023).

2.1.2. Types of plagiarism

Direct: possibly the most common, it consists of a copy-paste of someone else's work without proper referencing.

Mosaic: using a variety of sources to create new work, composed of existing ideas, text or concepts. The original work is also not referenced adequately in this situation.

Self-plagiarism: less common, it consists of reusing own previous work without proper referencing. Even though the author is the same, the attribution of the work still needs to be done (Bytescare, 2023).

2.1.3. Examples of plagiarism

- Quoting words, sentences or entire paragraphs from an article, a website or even a speech or a conference, without acknowledging the author(s).
- Copying the work from someone else without any referencing.
- Buying the work of someone else (or having the work done by someone else) and presenting it as its own.
- Paraphrasing in a way that relies so heavily on someone else's work that it cannot be considered to be different, without referencing (UIC, 2023a; Das, 2023).

2.1.4. Copyright infringement

Copyright infringement is understood as the use of some material that is subject to a licence, without obtaining the right to use said material (Bytescare, 2023; UIC, 2023a; Das, 2023; Arnold & Levin 2021). These rights are automatically given to authors of what we could call artistic or creative work, such as software, movies, photographs, songs, literature and online content (Das, 2023; Arnold & Levin 2021). Owners of the copyrights may use, reproduce, distribute, and display their work as they see fit (Bytescare, 2023; Arnold & Levin 2021). They can also grant permission to whomever they want to use or reproduce their work, and they are free to determine the conditions associated with that permission (Das, 2023).

2.1.5. Types of copyright infringement

Direct: when material that is subject to copyrights is either copied or used without authorisation.

Indirect: when a person or an organisation facilitates or contributes to copyright infringement(s) by hosting unauthorised material on its servers, or by providing software or tools to do so (Bytescare, 2023).

2.1.6. Examples of copyright infringement

- Using a video, audio, photo or diagram in a way that it is made available to the public (such as posting or uploading it online) without the consent of the owner of the material.
- Distributing a video, audio, photo or diagram without the consent of the owner of the material.
- Obtaining or making available a video, audio recording, photo or diagram on websites that are unauthorized, malicious or part of the dark web (Das, 2023).

2.1.7. Intellectual property

Intellectual property (IP) consists of everything that can be created by someone. It can be inventions, literature and written content in general, art, design, symbols, names, images, brands and logos. Intellectual property is protected by a number of laws, such as copyrights, trademarks, patents and trade secrets (World Intellectual Property Organization [WIPO], 2023).

2.1.8. Types of intellectual property

Copyrights: covers materials such as written work, photos, videos and other medium of expression. It is *de facto* given to the author, since it is a right normally enshrined in national laws of most countries. It is still possible to formally register a copyright, which gives more tools to the author when comes the time to enforce copyrights.

Trademarks: can be a word, a symbol, a phrase, or a distinctive mark. A trademark needs to be formally registered.

Patents: protects inventions from being stolen, copied and used. The patent requires the creator to register the invention with the appropriate patent office, and the patent is usually valid for a finite period of time. Patents are usually confined to the country where they have been registered, which means a creator may need to patent its creation in more than one country.

Trade secrets: confidential information that may consist of competitive data, algorithms and formulas, recipes and processes, and customers lists. They are typically not registered but can be protected by non-disclosure and confidentiality agreements between the organization and its employees (Business Development Bank of Canada [BDC], 2023).

2.1.9. Fair use

The “fair use” principle allows for limited use of copyright protected material without the owner’s explicit authorization. Uses that fall outside the “fair use” principle require the author to seek permission from the owner of the material prior to using it (UIC, 2023b). In a way, “fair use” provides a defence for the person using the material against potential lawsuits, under specific circumstances (Das, 2023). These specific circumstances may sometimes be difficult to establish, and the boundary between what is legal and what is not can be intricate. However, the following factors may be used as guiding principles:

- **Purpose:** usage for purposes such as non-commercial, non-profit organizations, educational, scientific, or historical.
- **Nature of the work:** material based on facts will more easily fall under “fair use”, because those facts could have been derived from other sources. Opinions and fictional work, and material of a more creative nature doesn’t.
- **Amount of material used:** small amounts (a few sentences) are more likely to be considered “fair use”. That said, if these few sentences contain the major ideas of the material, it may not be the case.
- **Effect of the use:** copyrights are made to protect the stream of revenue of the author. If the utilization is potentially depriving its author from part of its market, then it may easily be considered to be against “fair use” (Das, 2023; Copyright Alliance, 2023).

Unfortunately, there is no black and white when it comes to “fair use”, it is determined on a case-by-case basis where context has to be taken into account. “Fair use” can easily be justified for purposes such as criticism, comments, news reporting, teaching and education, scholarship and research (Copyright Alliance, 2023).

2.2. Differences between copyright violation and plagiarism

As mentioned above, the main difference between plagiarism and copyright infringement is that the former is not illegal, while the latter is (UIC, 2023a; Arnold & Levin 2021). While this might occasionally be the same person or the same entity, plagiarism is an offence against the author of the original work, while copyright infringement is an offence against the owner of the copyrights (UIC, 2023a). In most cases, copyright infringements are perpetrated using (without authorisation) brand names, logos, songs, images, trademarks, etc., while plagiarism applies mostly to intellectual work (ideas, concepts, text) (UIC, 2023a; Arnold & Levin 2021). In short, plagiarism is the use of someone else's work, and it deprives the author of the credit that they deserve, while copyright infringements deprive the owner of these rights from revenue streams (UIC, 2023a).

2.2.1. Plagiarism that is not a copyright infringement

A member of an IFATCA committee writes a working paper and copies a few sentences taken from a well-known aviation website without properly referencing their source. Technically speaking, it is not a copyright infringement, because the amount of information that was copied is so inconsequential that it is unlikely to deprive the author from potential revenue. However, in this case, it is plagiarism, because the author used the work of someone else, and claimed it as their own (Arnold & Levin 2021).

2.2.2. Copyright infringement that is not plagiarism

A member of an IFATCA committee writes a working paper and reproduces a brochure produced by a well-known aviation entity in its entirety. 100% of the content is reproduced, but the author is cited on every page appropriately. In this case, yes, the work was referenced properly, but the entire work of the original author was used without its consent, which goes far beyond "fair use" (see 2.1.9 above) (Arnold & Levin 2021). It can therefore be said that it is copyright infringement.

2.2.3. Plagiarism that is also copyright infringement

A member of an IFATCA committee is building an online course on volcanic ashes. To that end they use a course that has already been made by a well-known aviation entity. The content of the course is slightly altered, but the ideas, the structure and flow of the course is basically the same. No references to that existing course are provided. In this case, the author not only plagiarized the work of someone else, pretending it is their own, but also infringed copyright laws by using someone else's work without their consent, potentially depriving them from revenues that they would normally earn (Arnold & Levin 2021).

2.3. How to avoid plagiarism and copyright infringement

2.3.1. Avoid copyright infringement

There are some easy ways to avoid ending up in a situation where copyrights may have been violated:

- Knowing who is the owner of the material is essential to know who to ask for permission and if the usage is appropriate.
- When in doubt or without formal authorization, never use content for which no permission has been granted. Asking permission is usually not complicated and often, the owner made aware of the intended use will be more inclined to respond favourably.
- Always obtain a written consent of such permission. Spoken words cannot be traced.
- In more complex situations, getting the advice of a lawyer can be a good idea. Copyright laws can be complicated and without proper expertise, one can easily get lost.
- Finally, the best way to avoid copyright infringement... is to create original material (Das, 2023).

2.3.2. Avoid plagiarism

There are some easy ways to avoid ending up in a plagiarism situation:

- Always give credit to the author of the original material when using an idea, an opinion, or a philosophy.
- Always reference properly facts, statistics, graphs and tables, drawings and other information when they are derived from sources other than yourself.
- When quoting *verbatim* (spoken and written words), always use quotation marks, do not alter the text, and reference the segment adequately.
- When paraphrasing (spoken and written words), the segment still needs to be referenced. As a guideline, a distinct reference should appear each time a new idea is brought forward (UIC, 2023c).

2.4. Roles and responsibilities of authors

As a representative of- and contributor to the Federation's objectives, it is expected that authors and content creators will not use, or facilitate the use of, another person's or organisation's work, published or not, in totality or in part, in any written support, project, social media publication or else, without providing sufficient and adequate referencing for the work cited integrally or paraphrased. It is also expected that the "fair use" principle will be adhered to at all times, and that copyright laws and common principles pertaining to it will be strictly adhered to, by not using material without express authorization from the owner of the said material (McGill University, 2023).

2.5. How to reference sufficiently and adequately

As mentioned above, the importance of referencing should not be underestimated. Similar to university essays, thesis, and scientific articles, IFATCA working papers, articles, educational material and social media publications shall be properly referenced. Any direct citation and paraphrasing

shall be properly reflected in the body of the paper, as well as in the bibliography at the end of the paper (IFATCA, 2023).

Several conventions exist when it comes to referencing (APA, Harvard, Vancouver, Chicago, MLA, etc.), but the most commonly used is the American Psychological Association (APA). The association has recently published the 7th Edition of the APA Publication Manual.

To facilitate the work of its representatives and volunteers, IFATCA has published an online guide that summarizes the most important notions related to referencing. The guide provides a number of rules, guidelines and examples, which makes it easy for the author to reference properly its material. The guide can be accessed at the following address: <https://www.ifatca.org/referencing/>.

2.6. Consequences of copyright violation and plagiarism

Plagiarism is unethical, but it may also have legal and professional consequences (Bytescare, 2023). The reputation of both the creator of the work and the person stealing the work can be affected negatively (Bytescare, 2023; 5). Also, financial implications may arise in the event of a lawsuit, which can range from a few hundred dollars to multi-millions suits (Bytescare, 2023). From the legal perspective, the perpetrator may also face legal injunctions and criminal suits (Arnold & Levin, 2021).

When looking at plagiarism from an academic perspective, consequences for a student can range from a warning from the professor to failing an assignment or an exam and could even lead to exclusion from a programme or even expulsion from the establishment (Das, 2023). However, in the professional sphere in which we are evolving, the consequences can be far more severe and affect not only the reputation and potentially the career of the perpetrator, but also the credibility and reputation of the Federation, causing an erosion of trust, image, and respect for the organization (Bytescare, 2023). The media attention that could result from this can also be significantly detrimental (Das, 2023).

Regarding copyright infringements, they can lead to legal actions, including hefty fines, lawsuits or even criminal charges being pressed against the perpetrator. Copyright infringements also deprives the original creator of the material from revenue they deserve for their work. In the long run, it discourages innovation and creation of new work and creates unfair competition. Finally, violation of copyrights poses a serious ethical concern for both the perpetrator and the organisation that endorses it, willingly or unwillingly (Bytescare, 2023).

2.7. Some examples of law related to copyright and intellectual property

The following links provide a variety of examples of copyright laws in effect in different States where IFATCA has a member association:

- Australia (Copyright Law):
<https://www.alrc.gov.au/publication/genes-and-ingenuity-gene-patenting-and-human-health-alrc-report-99/28-copyright-and-databases/copyright-law/>
- Canada (Copyright Act (R.S.C., 1985, c. C-42)):
<https://laws-lois.justice.gc.ca/eng/acts/c-42/>
- European Union copyright legislation:
<https://digital-strategy.ec.europa.eu/en/policies/copyright-legislation>
- South Africa (Copyright Act):
https://www.gov.za/sites/default/files/gcis_document/201504/act-98-1978.pdf
- United Kingdom (Copyright Law):
<https://copyrightservice.co.uk/f/5716/9839/4538/edupack.pdf>
- United States (Title 17 of the United States Code):
<https://www.copyright.gov/title17/>
- Copyright Laws around the world:
https://pq-static-content.proquest.com/collateral/media2/documents/copyrightlaws_world.pdf

2.8. Proposed IFATCA policy on plagiarism, copyright infringement and intellectual property

2.8.1. Introduction

IFATCA recognizes that academic, scientific and professional dishonesty is a denial of ethical values, as it undermines the credibility of research and is a negation of sound academic practice.

IFATCA also recognizes there is no added value when copyright is infringed and/or unethical research practices are used; the material produced under such circumstances does not expand existing knowledge in the aviation field, but rather, academic integrity is severely compromised. Unethical research and writing practices undermine the purpose of and the goals IFATCA is pursuing. Dishonest practices may cast doubt on IFATCA's ability to promote sound and efficient professional work and research.

2.8.2. Objectives

The objective of the present policy is to encourage and empower all contributors to IFATCA's work (including but not limited to: the executive board, the standing committees, ICAO representatives, volunteers, experts, etc.) to uphold ethical standards, and to give the Federation the power it needs to act in cases where contraventions of ethical academic standards occur.

The present policy and accompanying guidance material, as contained in the IFATCA Blue Book, also aim to provide information and guidelines to recognize potential situations where intellectual property may be compromised, recognize the consequences of such violations and prevent them from happening. The guidance material also contains tools to assist with adequate and sufficient referencing of sources.

IFATCA expects all written publications such as working papers, social media publications and other academic or scientific material to be the result of its author's labour.

IFATCA also expects that when external sources are used (e.g., websites, government or international organizations publications, scientific literature, grey literature, etc.), the original author(s) will be adequately and sufficiently referenced, in accordance with globally recognized referencing practices (such as APA, MLA, Chicago, Vancouver, etc.).

2.8.3. Copyright infringement

IFATCA defines copyright infringement as a situation where the original owner's exclusive rights of intellectual property are performed without the express authorization of the owner.

IFATCA recognizes that some exceptions exist that may limit the application of copyrights, allowing portions of a copyright work to be reproduced or adapted under certain circumstances such as academic and scientific research, critics and reviews, reporting, *inter alia*. This practice is commonly referred to as "fair use".

IFATCA supports academic and scientific research. However, the Federation understands that the "fair use" principle does not allow clear delineation between what is acceptable and what is not. Criteria such as the nature of the work used, the amount of work used, and the context and objectives under which the work is used need to be considered to determine whether the "fair use" principle can be applied.

Under no circumstance does the "fair use" principle release the author from its responsibility to reference adequately and sufficiently the material used, quoted, or paraphrased.

2.8.4. Examples of copyright infringement

- The absence of a clear indication (e.g., quotation marks, reference) that a sentence or a passage is reproduced *verbatim* and is taken from a published or unpublished work that is not original material from the author.
- Paraphrasing an article, a book, or else, from a paperback or an electronic support, without acknowledging the source(s) and the author of the original work.
- Using a substantial amount of material from external sources, enough to be considered outside the scope of the "fair use" principle, even if the source(s) are referenced adequately and sufficiently.

2.8.5. Plagiarism

IFATCA defines plagiarism as the use of somebody else's work, concept(s) or idea(s) without giving them credit for the said work. The author plagiarising is presenting their work as if it was original.

IFATCA considers plagiarism an ethical issue that has serious implications. It is a violation of academic and intellectual integrity, and it applies to all types of media (written, electronic, visual and audio).

2.8.6. Examples of plagiarism

- The absence of acknowledgement (referencing of the source(s)) to the author where the sentence or passage was either reproduced *verbatim* from published or unpublished material.
- The use of ideas, concepts, principles or processes and their presentation without acknowledgement to the author, or the act of summarizing the essence of a message or an argument in a language that retains its original intent without acknowledgement.
- The act of “patch-writing” (also known as copy-paste), where small portions or entire sections of someone else’s original work are incorporated and blended with new material to make it look new, without acknowledgement to the author(s).

2.8.7. Dishonest practices

While not being specific and clear applications of plagiarism and/or copyright infringement, the following practices are unethical and will not be tolerated under any circumstances by IFATCA:

- Re-using, for example, a working paper submitted and published by an IFATCA committee and presenting it as its own, unique work.
- Buying material from an external source and presenting it as its own, unique work.
- Asking someone else to produce material and presenting it as its own, unique work.

2.8.8. Violations to IFATCA’s policy

Anyone directly or indirectly involved in IFATCA’s work who is found guilty of violation(s) to the present policy, or any other form of copyright infringement, plagiarism, violation of intellectual property rights, or unethical and/or dishonest work practices will be subject to investigation by the IFATCA Executive Board and may be subject to disciplinary measures, as deemed appropriate.

2.8.9. Conclusion

IFATCA expects all those involved with the work of the Federation to adopt ethical and professional practices, including the acknowledgement of the work done by others. Citing (referencing) sources ensures not only compliance with applicable national and international laws and treaties, but also demonstrates professionalism and respect of scientific methodology. It is a form of respect towards others and their intellectual property and economic rights.

3. CONCLUSION

- 3.1. While significantly different, plagiarism and copyright infringements share some commonalities. They both involve the unauthorized use of material that was created by someone else, they are both detrimental to the reputation and image of the organization and the perpetrator, and they can both lead to legal/ethical consequences (Bytescare, 2023).
- 3.2. It is essential that authors and content creators familiarize themselves with the intricacies of plagiarism and copyright infringement to better understand their rights and obligations, how to avoid unauthorized use of material that is not theirs, how to respect intellectual property, and finally how this can affect themselves and the organization for which they are producing the work.

4. RECOMMENDATIONS

- 4.1. It is recommended that the IFATCA Blue Book is amended to include a new chapter, which would be comprised of sections 2.1 to 2.7 of this paper.
- 4.2. It is recommended that the following policy is adopted by this Conference and incorporated in the IFATCA Administrative Manual (IAM):

IFATCA recognizes that academic, scientific and professional dishonesty is a denial of ethical values, as it undermines the credibility of research and is a negation of sound academic practice.

Unethical research and writing practices undermine the purpose of and the goals IFATCA is pursuing. Dishonest practices may cast doubt on IFATCA's ability to promote sound and efficient professional work and research.

IFATCA encourages and empowers all contributors to IFATCA's work (including but not limited to: the executive board, the standing committees, ICAO representatives, volunteers, experts, etc.) to uphold ethical standards, and to give the Federation the power it needs to act in cases where contraventions of ethical academic standards occur.

The present policy and accompanying guidance material, as contained in the IFATCA Blue Book, aim to provide information and guidelines to recognize potential situations where intellectual property may be compromised, recognize the consequences of such violations and prevent them from happening. The guidance material also contains tools to assist with adequate and sufficient referencing of sources.

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