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description: History of the LMCF method for Rubik's Cube.

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import Exhibit from "@site/src/components/Exhibit";

import YouTube from "@site/src/components/YouTube";

import ImageCollage from '@site/src/components/ImageCollage';

# LMCF

<Exhibit

stickering={{

solved: "DFR DFL DBL DBR UFR UFL UBL UBR"}}

/>

## Description

\*\*Proposer:\*\* [Eric Fattah](CubingContributors/MethodDevelopers.md#fattah-eric)

\*\*Proposed:\*\* 2017

\*\*Steps:\*\*

1. Solve all corners.

2. Solve a couple of edges in the U layer while looking ahead for edges to form pairs.

3. Solve edges until reaching the L7E or LSE state.

4. Solve the remaining edges.

[Click here for more step details on the SpeedSolving wiki](https://www.speedsolving.com/wiki/index.php/LMCF)

## Origin

### Development

In August, 2023, Eric Fattah stated that he had independently invented the Waterman method in 1981 [1]. Fattah would have been around six years old at the time [2].

![](img/LMCF/Fattah1.png)

Eric Fattah described the origin in more detail in a private message on speedsolving.com [3].

![](img/LMCF/Fattah2.png)

>This is a private message between Fattah and I.

### Proposal

The complete LMCF method was proposed in February, 2017 [4].

![](img/LMCF/Proposal.png)

# References

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| [1] | E. Fattah, "Technique pushed in 1981?," SpeedSolving.com, 1 August 2023. [Online]. Available: https://www.speedsolving.com/threads/technique-pushed-in-1981.90636/post-1553358. |
| [2] | "Eric Fattah," Vertical Blue, 5 April 2008. [Online]. Available: https://archive.verticalblue.net/assets/archive/news-archive-pdf/Vertical%20Blue%20News%202008-04-05-1406%20(Eric%20Fattah).pdf. |
| [3] | E. Fattah, Interviewee, *Origin of LMCF - Interview by Michael James Straughan.* [Interview]. 26 September 2022. |
| [4] | E. Fattah, "Full LMCF 3x3 method now available," SpeedSolving.com, 26 February 2017. [Online]. Available: https://www.speedsolving.com/threads/full-lmcf-3x3-method-now-available.63998/. |