

PTB • Postfach 33 45 • 38023 Braunschweig • Germany

Dr. Tomohiro Hase, IEEE Fellow.

IEEE History Committee.

Advocate, Milestone proposal #2025-20

Your reference: 2025-20

Your letter of: 20250810

My reference:

My letter of:

Handled by: ab

Telephone:

Fax:

E-mail: andreas.bauch@ptb.de

Date: 20250815

Dear Hase-san,

what follows is my assessment of the Milestone-Proposal: JJY: Standard Signal Transmitting Station in Japan, 1940, submitted by our Japanese colleagues.

I served as head of the time dissemination group at PTB until I retired end 2022. I still keep contact with colleagues, also from Japan through my involvement in ITU project work. You can read about our activities at www.ptb.de/time.

(1) Is suggested wording of the Plaque Citation accurate?

Yes, the suggested wording of the Plaque Citation is accurate and concise. It reflects the technical achievement and historical importance of JJY. The citation mentions the start of frequency signal transmission in 1940 and the addition of standard time signals in 1948, confirmed by verified historical records. It also highlights JJY's role in national synchronization and its enduring legacy in modern infrastructure.

(2) Is evidence presented in the proposal of sufficient substance and accuracy to support the Plaque Citation?

Yes, the proposal presents substantial and accurate evidence to support the Plaque Citation. It includes:

- Official government announcements (Kanpō, 1940)
- Peer-reviewed publications (IEEJ Journal, NICT reports)
- Historical technical documentation (Tanaka et al., 1983)
- International comparisons (WWV history, NIST publications)

These sources confirm the dates, technical specifications, and societal impact of JJY, validating the claims made in the citation.

(3, 4) Does proposed milestone represent a significant technical achievement? Were there similar or competing achievements? If so, have the proposers adequately described these and their relationship to the achievement being proposed?

Yes, the proposed milestone represents a significant technical achievement. JJY was the world's second national standard time and frequency signal station, following WWV in the

Domicile:
Bundesallee 100
38116 Braunschweig
GERMANY

Telephone: +49 531 592-0
Telefax: +49 531 592-9292
E-mail: poststelle@ptb.de
De-Mail: poststelle@ptb.de-mail.de
Internet: <http://www.ptb.de>

Deutsche Bundesbank, Filiale Leipzig
IBAN: DE38 8600 0000 0086 0010 40
BIC: MARKDEF1860
VAT-Nr.: DE 811 240 952

PTB Berlin-Charlottenburg
Abbestr. 2-12
10587 Berlin
GERMANY

United States. JJY was designed from the outset as a national infrastructure project. The proposal clearly describes JJY's unique features:

- Early integration of public service and regulation
- Technical innovations such as automatic signal generation and time-pulse transmission
- Strategic role in Japan's electromagnetic spectrum management

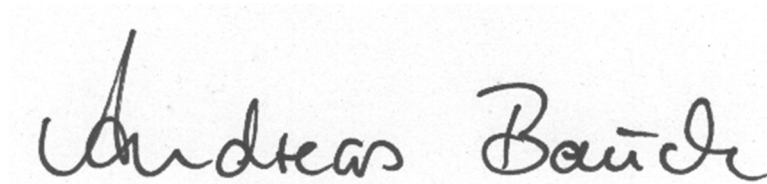
The relationship to WWV and other international stations (e.g., MSF in the UK) is well-documented.

One could add that the use of radio waves for time dissemination was not entirely new and not a Japanese invention. Even before WWV and MSF, radio stations cooperated with astronomical observatories to generate time signals. The most prominent radio tower in use for such purposes was the Paris Eiffeltower.

(5) Have proposers shown a clear benefit to humanity?

Yes, the proposal demonstrates a clear and lasting benefit to the society in Japan. JJY enabled nationwide synchronization of clocks and systems, improving efficiency in transportation, telecommunications, broadcasting, and scientific research. Its signals laid the foundation for the widespread use of radio-controlled clocks, which are now ubiquitous in Japanese homes, offices, and infrastructure.

I hope to meet your expectations.
Sincerely Yours

A handwritten signature in dark ink, reading "Andreas Baucke". The signature is written in a cursive, flowing style. The first name "Andreas" is written in a larger, more prominent script, and the last name "Baucke" follows in a similar but slightly more compact style. The ink is dark and the background is a light, textured surface.