



Journal of the Japan Society of
Naval Architects and Ocean Engineers
The Japan Society of Naval Architects and Ocean Engineers

[Available Volumes](#) | [Japanese](#) >> [Publisher Site](#)

Author: [ADVANCED](#) | Volume Page
Keyword: |



[TOP](#) > [Available Volumes](#) > [Table of Contents](#) > Abstract

ONLINE ISSN : 1881-1760

PRINT ISSN : 1880-3717

Journal of the Japan Society of Naval Architects and Ocean Engineers

Vol. 5 (2007) pp.99-106

[\[PDF \(1192K\)\]](#) [\[References\]](#)

Development of the Tandem Offloading System for NGH-FPSO

[Kazuhiro Yukawa](#), [Takayuki Asanuma](#), [Hiroshi Sato](#), [Shunji Kato](#), [Tatsuya Takaoki](#),
[Kazushi Hirai](#), [Misao Kamei](#), [Masaaki Wakasa](#), [Toshiro Arima](#), [Yoshimi Uraguchi](#) and
[Kunihisa Sao](#)

(Accepted March 12, 2007)

Summary: NGH (Natural Gas Hydrate)-FPSO is deemed as one of the attractive solutions for relatively small gas fields. NGH process plant is installed on board FPSO and it produces NGH from raw gas transferred directly from subsea wells through flowlines and risers. For 3 years since 2004, we have been investigating tandem offloading system for NGH-FPSO and a shuttle tanker in the south east Asia and Oceania. We evaluated workability of the tandem offloading system for NGH-FPSO under combined environmental conditions. As a result, we confirmed that workability under the offloading conditions attained 100% by using a mooring unit that has large restitution force. Based on the aforementioned results, we carried out a safety assessment of the offloading system according to HAZID (Hazard Identification Study) and were awarded AIP (Approval in Principle) by NK. Furthermore, comparison of economical efficiency between NGH-Chain and LNG-Chain, under the conditions that gas production was between 48 to 275MMscfd, the production period was 30 years, and the destination was Japan, indicated that NGH was advantageous when gas production was 80MMscfd or less. The results of investigation on the tandem offloading system for NGH-FPSO are reported in this paper.

[\[PDF \(1192K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

[RIS](#)

[BibTeX](#)

Kazuhiro Yukawa, Takayuki Asanuma, Hiroshi Sato, Shunji Kato, Tatsuya Takaoki, Kazushi Hirai, Misao Kamei, Masaaki Wakasa, Toshiro Arima, Yoshimi Uraguchi and Kunihiisa Sao: Development of the Tandem Offloading System for NGH-FPSO , Journal of the Japan Society of Naval Architects and Ocean Engineers, (2007), Vol. 5, pp.99-106 .

Copyright (c) 2007 The Japan Society of Naval Architects and Ocean Engineers



[Japan Science and Technology Information Aggregator, Electronic](#)

