

## ENR 5.3 OTHER ACTIVITIES OF HAZARDOUS NATURE

### 1. ACTIVITIES IN THE NORTHERN PART OF THE NORTH SEA (Oil rigs)

#### 1.1 General

In connection with the exploration and production of oil and gas in the northern part of the North Sea, activities may occur which could endanger air traffic in the area. These activities could be: intensive flying with helicopters and "Cold Flaring".

In the following precautionary measures to be taken in order to minimize risk to the air traffic as well as to the staff at the installations concerned will be outlined. Change to this information will be promulgated via NOTAM class I.

#### 1.2 Cold Flaring

Gas escaping from the oil production will normally be burned off. When the oil production is restarted after a shut down involving opening of the installations to the atmosphere it is necessary to purge the pipework and vessels before reignition of the gas. During this procedure, called "Cold Flaring", large amounts of gas will be pouring into the atmosphere, creating an explosive mixture.

The extend of the mixture is depending on the actual weather conditions.

"Cold Flaring" may take place from all fixed mobile oil- and gasinstallations:

Actual information concerning "Cold Flaring" is available from THYRA AFIS on frequency 118,425 Mhz within following opening hours:

Winter daily 0500-2100Z - SAT-SUN 0500-0900Z and 1400-2100Z  
Summer daily 0400-2000Z - SAT-SUN 0400-0800Z and 1300-2000Z

Air traffic is advised to pass installations from which "Cold Flaring" is taking place at a lateral distance of 3 NM or more at an altitude of 3.000 FT MSL or above.

#### 1.3 Risk Of Explosion In The Vicinity Of North Sea Oil And Gas Installations

In connection with perforation of underground wells, explosive charges are released by means of radio waves.

Radio waves covering the whole frequency spectrum might release an explosion if they are received when detonators are being inserted or removed.

To avoid inadvertent explosion, which can be a risk to the crew on the installation and damage the installation, air traffic is strongly requested to pass all fixed and mobile installations at a lateral distance of 1 NM or more or at an altitude of 3000 FT MSL or above.

#### 1.4 Fixed Oil And Gas Installations

A list of fixed installations are given below.

DAN B	PSN	552810N 050812E
DAN E	PSN	552852N 050655E
DAN FC	PSN	552840N 050619E
GORM C	PSN	553446N 044525E

ROLF	PSN	553622N 042931E
SKJOLD C	PSN	553158N 045431E
TYRA EAST A	PSN	554317N 044806E
TYRA WEST A	PSN	554259N 044500E

### 1.5 Mobile Oil and Gas Installations:

Positions of mobile installations will not be published in AIP.

### 1.6 Flare Stacks Other Than Off-Shore

From the flare stack located at position stated below escape and burning of gas and condensates may take place occasionally.

- a. NW of Varde at PSN 554005N 082155E (see ENR 5-4-3 OBST VARDE).
- b. N of Viborg at PSN 563825N 092503E.
- c. S of Kalundborg at PSN 553913N 110601E (see ENR 5-4-2, OBST KALUNDBORG 2).

Due to high temperature and risk of explosion it is recommended to avoid overflying of the flare stack below 2000 FT MSL

## 2. USE OF TOWING KITE PROPULSION SYSTEMS

Ships using a towing kite (skysail) as a supplement to traditional propulsion may constitute a danger to low flying aircraft over the sea. The towing kite is a large paraglider look-a-like device that is attached to the ship's bow with a synthetic rope. It normally manoeuvres constantly in a 'horizontal figure-eight' pattern in order to achieve maximum propulsion efficiency. The kite will normally operate ahead of the ship within 50° of its course and at an angle of 30-60° but it may occasionally operate up to 90° off the ship's course and at any angle up to zenith above the ship. The kite is illuminated at night.

With 2009 technology towing kites may operate up to 300 meters (1000 ft) above the sea. However, as technology improves this figure may double.

Towing kites may be used in class G airspace outside the territorial boundary, i.e. beyond the limits of national jurisdiction under the United Nations Convention on the Law of the Sea (UNCLOS).

