NO

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. **NAME OF RESEARCH SHIP** FRV Walther Herwig III **CRUISE NO. 413**

2. **DATES OF CRUISE** from 22.01.2018 To 26.02.2018

3. **OPERATING AUTHORITY:**

Bundesanstalt für Landwirtschaft und Ernährung
(BLE) Referat 524
Haubachstraße 86
D-22765 Hamburg

TELEPHONE: +49 (0)40 30 68 60 - 534
TELEFAX: +49 (0)40 30 68 60 - 555
e-Mail: Fischereiforschung@ble.de

4. **OWNER** (if different from no. 3) Federal Republic of Germany

5. **PARTICULARS OF SHIP:**

Name:	FRV Walther Herwig III
Nationality:	Germany
Overall length: (in metres)	63.18
Maximum draught: (in metres)	6.20
Net tonnage:	639 BRZ
Propulsion e.g. diesel/steam:	Diesel Electric
Call sign:	DBFR
Registration port and number (if registered fishing vessel)	

6. **CREW**

Name of master: Jürgen Vandrei or deputy

Number of crew: 22

7. **SCIENTIFIC PERSONNEL**

Name and address of scientist in charge: Dr. Matthias Kloppmann

Thünen Institute of Sea Fisheries
Palmaille 9
22767 Hamburg

Tel/telex/fax no.: +49 40 38905 196 fax: - 263
No. of scientists: 12

8. **GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE**
(with reference to latitude and longitude) *Entire North Sea between 54° N to 61° N, particularly in those rectangles assigned to Germany by ICES (see attached map)*

9. **BRIEF DESCRIPTION OF PURPOSE OF CRUISE** *International Bottom Trawl Survey (IBTS) 2018 Q1 under ICES coordination*

10. DATES AND NAMES OF INTENDED PORTS OF CALL

36 hours in the time period of 07. – 15.02.2018 in either Stavanger, Haugesund or Bergen, or none, depending on operational area at time of midterm break

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL

none

NO

NOTIFICATION OF PROPOSED RESEARCH CRUISE

1. PART B: DETAILS

1. NAME OF RESEARCH SHIP FRV Walther Herwig III **CRUISE NO. 413**

2. DATES OF CRUISE From 22.01.2018 To 26.02.2018

3. a) PURPOSE OF RESEARCH

Participation in the ICES coordinated International Bottom Trawl Survey (IBTS) 2018 Q1 in the North Sea.

1. *Trawling*
2. *Biochemical investigations*
3. *Plankton investigations*
4. *Hydrographic investigations*
5. *Echo registration*

b) GENERAL OPERATIONAL METHODS (including full description of any fish gear, trawl type, mesh size, etc.)

Fishing, Plankton net tows, CTD casts, water bottle sampling

Trawling – Standard IBTS fishing gear: Chalut au Grande Ouverture Verticale (GOV), codend mesh 20 mm

Plankton – Standard IBTS plankton net: 2 m ring trawl (modified Method Isaacs Kidd net – MIK) with 500 – 1600 µm mesh.

For details of both nets see attached drawings

4. ATTACH CHART showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

5.

a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)

Fish-, plankton-, water samples

All North Sea fish stocks are being worked on according to the ICES manual. No fish is retained on board except for scientific samples.

Small amounts of fish are kept for direct consumption on board and limited amounts (max 4 kg/person) for crew's home consumption.

b) METHODS OF OBTAINING SAMPLES (e.g., dredging/coring/drilling/fishing, etc. When using fishing gear, indicate fish stocks being worked, quantity of each species required, and quantity of fish to be retained on board).

Fishing, Plankton net tows, CTD casts, water bottle sampling

6. DETAILS OF MOORED EQUIPMENT

Dates Laying	Recovery	Description	Depth	Latitude	Longitude
	none				

7. **ANY HAZARDOUS MATERIALS** (chemicals/explosives/gases/radioactives, etc.)
(Use separate sheet if necessary)
none

a) Type and trade name

b) Chemical content (and formula)

c) IMO IMDG code (reference and UN no.)

d) Quantity and method of storage on board

e) If explosives give dates of detonation

- Method of detonation
- Position of detonation
- Position of detonation
- Frequency of detonation
- Depth of detonation
- Size of explosive charge in kg.

8. **DETAIL AND REFERENCE OF**

a) Any relevant previous/future cruises

Cruise is part of a standard series coordinated by ICES since the mid 1960's

b) Any previously published research data relating to the proposed cruise

All data are stored at ICES DATRAS and published in the framework of reports of the respective ICES working group: e.g. ICES 2011: Report of the International Bottom Trawl Survey Working Group (IBTSWG), ICES CM 2011/SSGESST:06

9. **NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE.**

Jennifer Devine, Irene Huse, Richard Nash, IMR, Bergen-Nordnes

10. **STATE**

a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable (Yes/No)

Yes

b) Participation of an observer from the coastal state for any part of the cruise together with the dates and the ports for embarkation and disembarkation
Yes

c) When research data from the intended cruise are likely to be made available to

the coastal state and by what means

Generally, all data will be uploaded directly to ICES-DATRAS for further treatment about 4 weeks after the cruise.

http://www.ices.dk/marine-data/data-portals/Pages/DATRAS.aspx
http://www.ices.dk/marine-data/data-portals/Pages/ocean.aspx

Furthermore:

1. *Cruise summary report through official channels; English summary will be available about 4 weeks after the cruise from BSH website*
   http://seadata.bsh.de/csr/retrieve/dod_index.html
2. *Short report latest at the end of March 2018*
3. *ICES IBTS working group report, end of April 2018*

NO

PART C. SCIENTIFIC EQUIPMENT

Complete the following table using a separate page for each coastal state

Coastal state: Norway
Port of call: Stavanger, Haugesund, Bergen
Dates: 36 hours within 07. – 15.02.2018

Indicate "YES" or "NO"

				DISTANCE FROM COAST		
List scientific work by function e.g.	Water column including sediment sampling of the seabed	Fisheries research within fishing limits	Research concerning the natural resources of the continental shelf or its physical characteristics	Within 4 nm	Between 4-12 nm	Between 12-200 nm
Trawling	Yes	Yes	No	No	Yes	Yes
Plankton	Yes	Yes	No	No	Yes	Yes
Water samples	Yes	Yes	No	No	Yes	Yes
CTD casts	Yes	Yes	No	No	Yes	Yes
Echo sounding	Yes	Yes	No	No	Yes	Yes
.						

Matthias Kloppmann

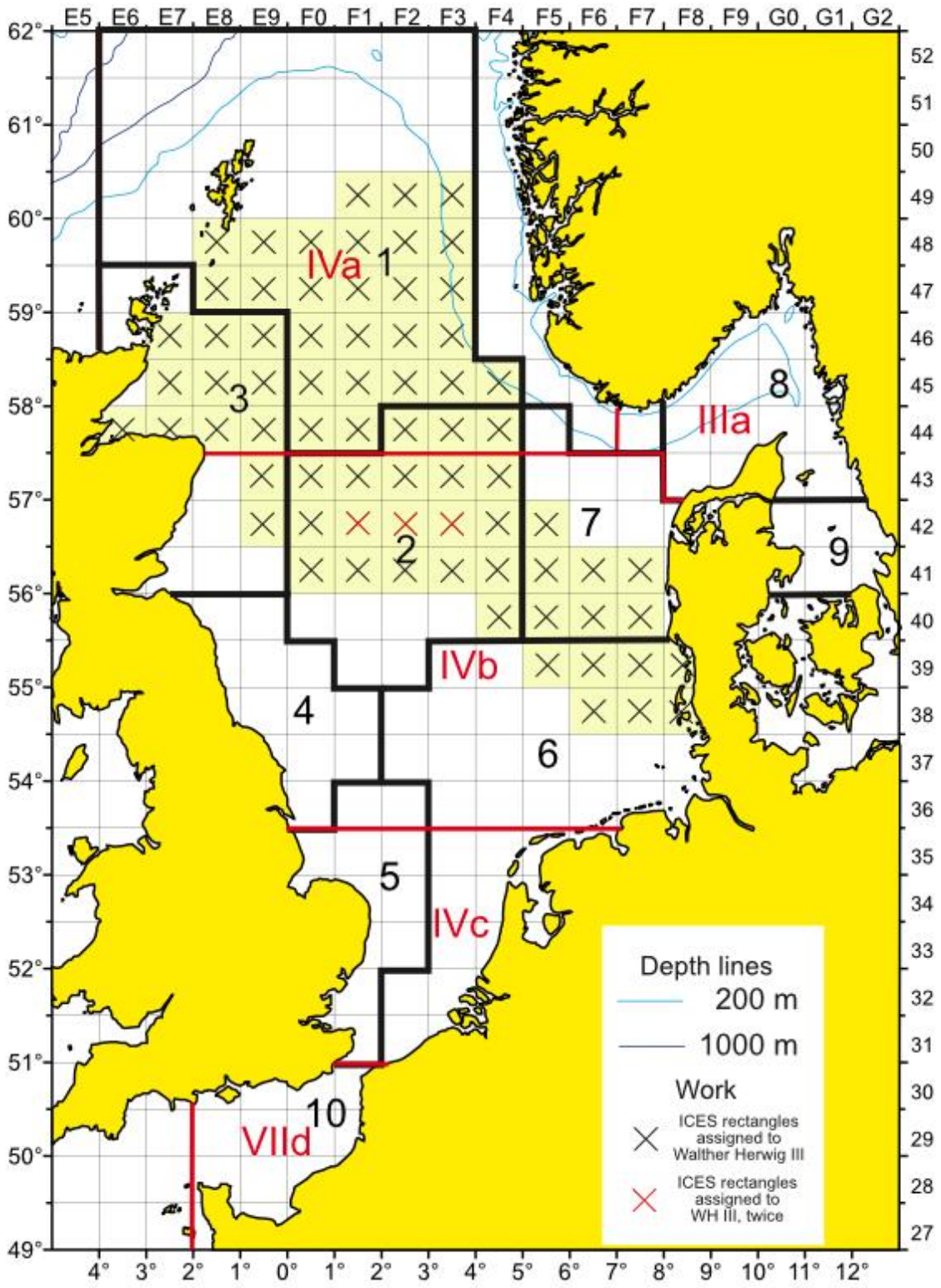
_____ Dated 30 June 2017

(Principal Scientist)

NB IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES/AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED, THE COASTAL STATE AUTHORITIES MUST BE NOTIFIED IMMEDIATELY

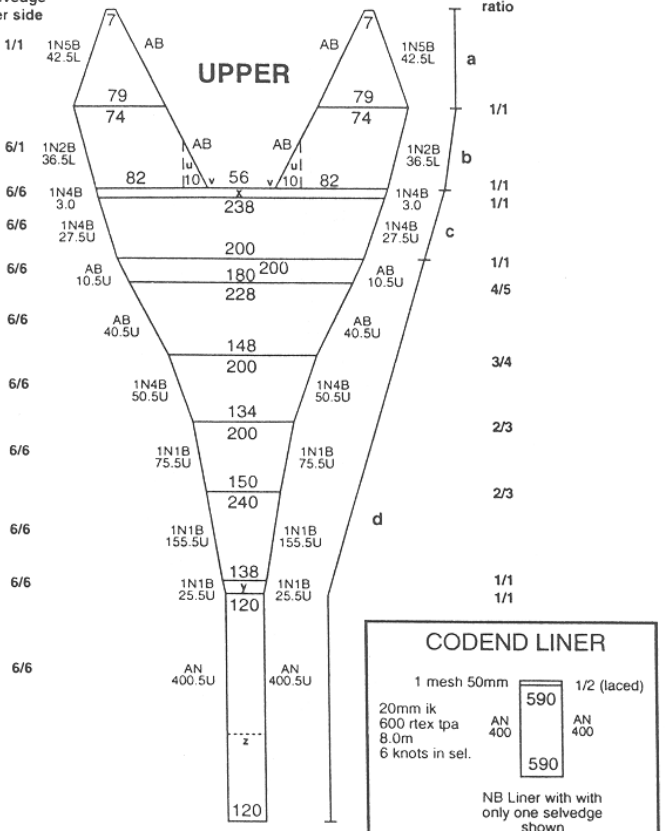
IBTS 2017(I)

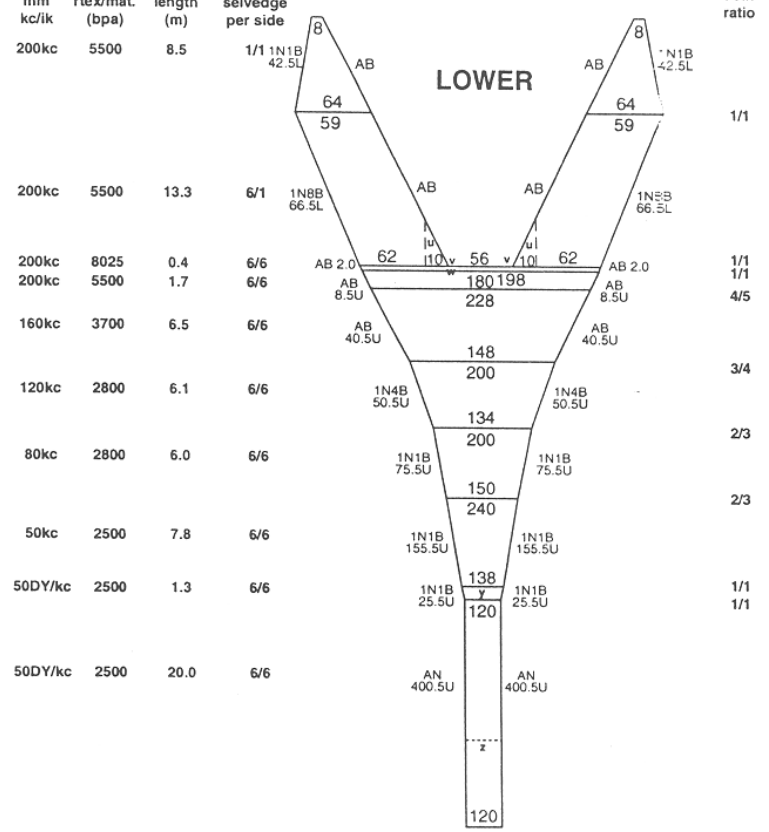
ICES rectangles assigned to WALTHER HERWIG III (marked with X, rectangles marked with red X should be sampled twice)



Construction of the 36/47 GOV trawl (adapted from drawings of the Institute des Peches Maritimes, Boulogne/Mer)

Mesh mm kc/ik	Twine rtex/mat. (bpa)	Stretched length (m)	Knots selvedge per side	Join ratio
200kc	3700	8.5	1/1	1/1
200kc	3700	7.3	6/1	1/1
200kc	8025	0.6	6/6	1/1
200kc	3700	5.5	6/6	1/1
200kc	3700	2.1	6/6	4/5
160kc	3700	6.5	6/6	3/4
120kc	2800	6.1	6/6	2/3
80kc	2800	6.0	6/6	2/3
50kc	2500	7.8	6/6	1/1
50DY/kc	2500	1.3	6/6	1/1
50DY/kc	2500	20.0	6/6	





CODEND LINER

1 mesh 50mm — 1/2 (laced)

20mm ik
600 rtex tpa
8.0m
6 knots in sel.

AN 400 — 590 — AN 400

590

NB Liner with with only one selvedge shown

Headline : 36m (15.50 + 5.00 + 15.50) x 14mm ϕ wire (f/c) served (6/19 - 12/6/1 65.8kg/100m).
Fishingline : 47.20m (21.10 + 5.00 + 21.10) x 22mm ϕ combination wire 6 strand/steel core 54.6kg/100m).
Winglines : Upper 8.2m, Lower 8.2m x 20mm ϕ combination wire (6 strand/steel core 54.6kg /100m)

a - 7.1m x 14mm ϕ wire (6/19 - 12/6/1 - 65.8kg/100m)
b - 6.7m x 20mm ϕ combination wire (6 strand/steel core - 54.4kg/100m)
c - 5.55m x 20mm ϕ combination wire (6 strand/steel core - 54.4kg/100m)
d - length for length x 22mm ϕ nylon (3 strand - 26kg/100m)

u - Gussets 8025rtex
v - 4 meshes gathered at quarters

w - 200 198
x - 240 238
y - 138 120

z - Joining position for Liner

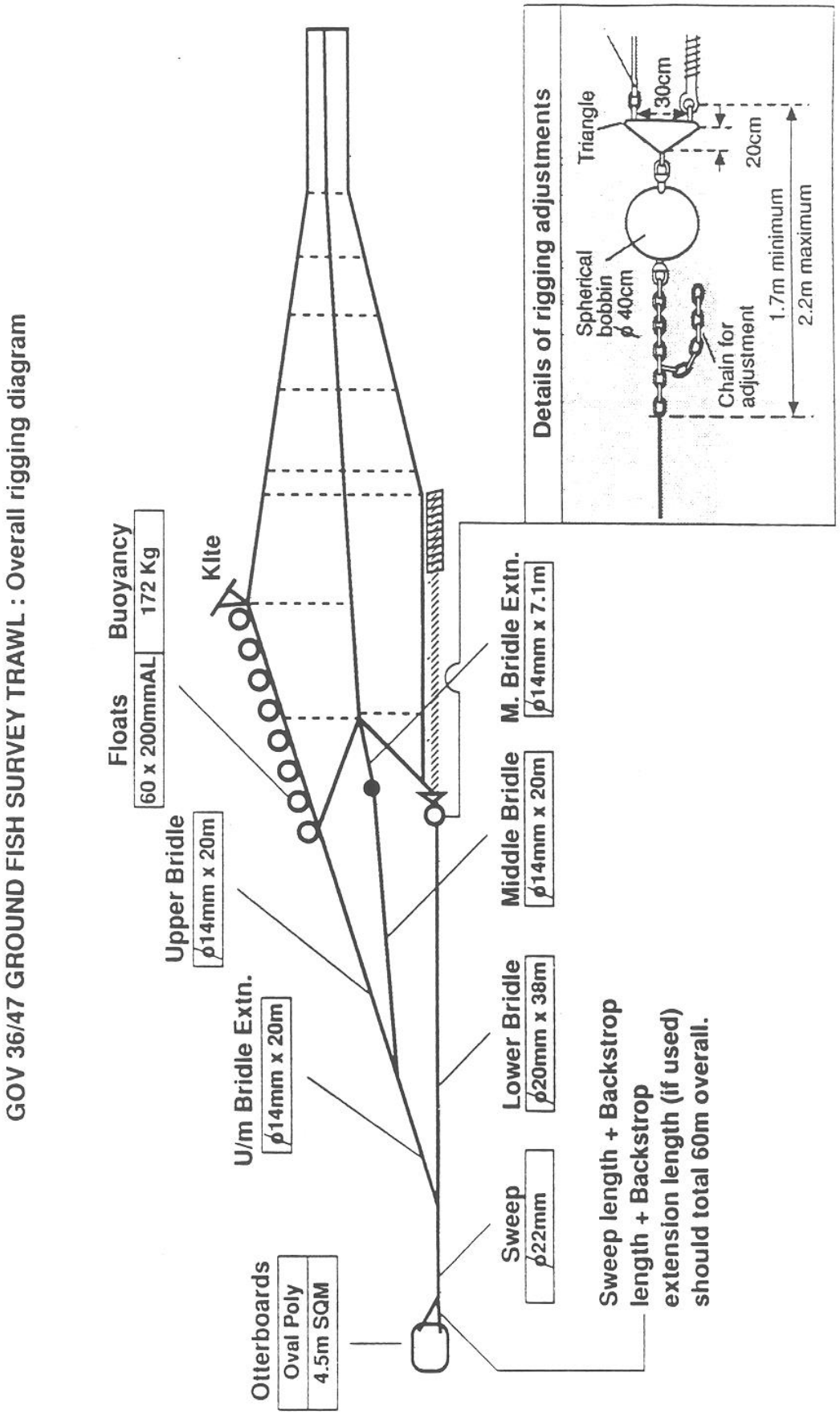
kc = knot centre to knot centre
ik = inside knot measurement
tpa = polyamide twine/twisted
bpa = polyamide twine/braided
dy = double yarn

Method of join used, sewing.
Type of knot, weavers knot.

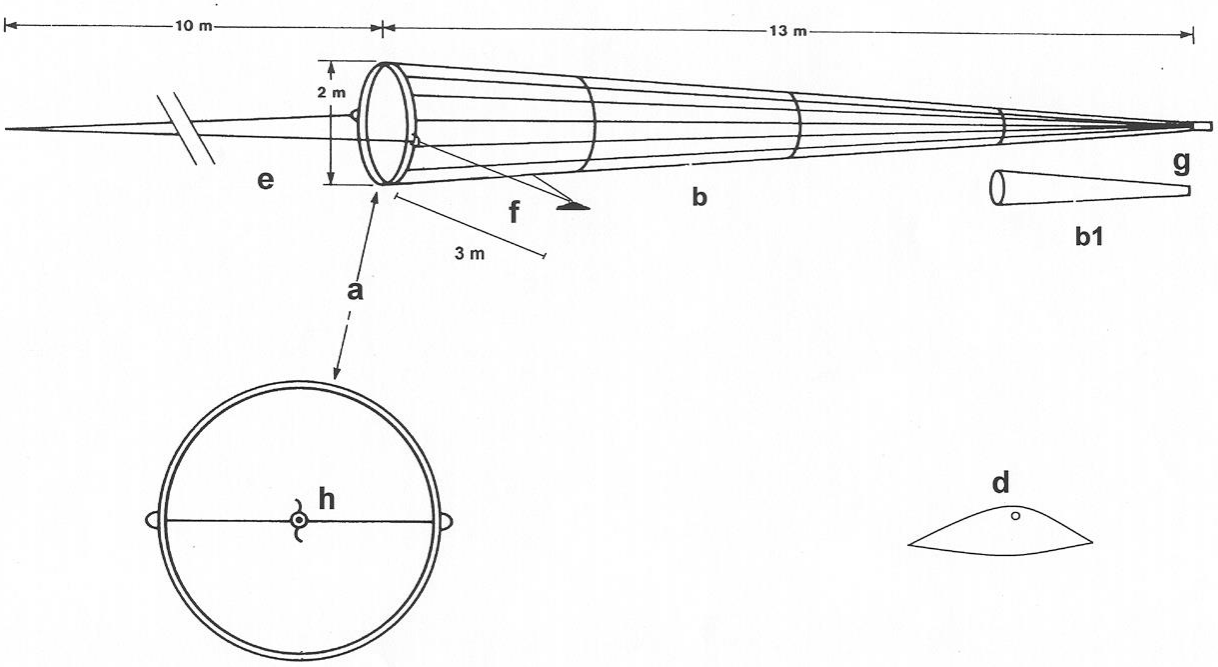
NOTE TO NETMAKERS

The numbers of meshes shown for netting panel widths do NOT include selvedge meshes. Five meshes (six knots) per selvedge must be added where indicated. Conversely to obtain panel depths one row (1/2 mesh) must be subtracted from each panel as the joining row is included in the number of meshes deep. The total numbers of meshes (width and depth) for each individual panel are set out in GOV 36/47 Groundfish Survey Trawl Checklist (Page 2 of 5)

GOV standard fishing gear (rigging)



Construction and rigging of the MIK plankton net



a) Ring of 2 meter diameter.

b) Black net of 1.6 mm pore, 13 meter long, strengthened by nylon or canvas straps. In the last metre of the net a 500 µm net is inserted (b1)

d) Saddle shaped weight or depressor.

e) Pair of 10 meter long bridles to the gear.

f) Pair of 3.0 meter long bridles to the weight or depressor.

g) Cod-end bucket (Ø 11 cm), netting of 500 µm

h) Flow meter mounted on a string crossing the ring, positioned in the center of the ring.