

RESTRICTED

INTERNATIONAL COMMISSION FOR



THE NORTHWEST ATLANTIC FISHERIES

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ANNUAL MEETING - JUNE 1967

Notification Series No.1

Notification re authorized topside chafing gear in the Convention Area



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Notification re authorized topside chafing gear
in Convention Area


1. Contracting Governments are herewith notified that, in accordance with a decision taken by the Commission at its 1966 Annual Meeting, the ICNAF-type chafer, the modified ICNAF-type chafer, the multiple flap-type chafer and the Polish-type chafer are approved pursuant to the Commission's 1963 and subsequent proposals regarding topside chafing gear in Subareas 1-5, on and after the date on which the said proposals come into effect.

(1966 ICNAF Ann.Proc. 16, p.19)

2. A Background Note detailing the development of Commission's proposals regarding topside chafing gear is attached as Appendix A.

3. An illustrated description and scientific evidence for authorization of the four Commission approved topside chafers is included in Appendix B for the ICNAF-type chafer, in Appendix C for the modified ICNAF-type chafer, in Appendix D for the multiple flap-type and in Appendix E for the Polish-type chafer.

Office of Commission
17 March 1967


L. R. Day
Executive Secretary

Background Note

to

Notification re authorized topside chafing gear in the Convention Area

1. Following adoption by the Commission in 1952 of trawl regulations which recommended that "no vessel while operating in Subarea 5 shall use any device by means of which the mesh in any part of a trawl net is obstructed or otherwise in effect diminished" (1952 ICNAF Ann.Proc. 2, p.12), the Commission adopted recommendations for Subareas 3, 4 and 5 in 1955 (1955 ICNAF Ann.Proc. 5, p.12) and 1957 (1957 ICNAF Ann.Proc. 7, p.17) and for Subareas 1-4 in 1961 (1961 ICNAF Ann. Proc. 11, p.15-18), specifying an approved topside chafing gear. This is the so-called ICNAF-type chafer and is described in the attached Appendix B.
2. At its 1963 Annual Meeting, the Commission recognized (1) the variety of topside chafers being used in the Convention Area and the possibility that new types might be used in the future and (2) the desirability of avoiding the addition of exemption clauses to regulations which would result in additional complexity and slow implementation of acceptance of regulations and (3) the desirability of eliminating, wherever possible, the adoption of regulations with reservations because of difficulties with the use of topside chafing gears. The Commission agreed that, as a remedial measure, less specific wording should be substituted for the definition of topside chafer in the trawl regulations adopted for Subarea 1-4 in 1961 (1961 ICNAF Ann.Proc. 11, p.15-18) and for Subarea 5 in 1955 (1955 ICNAF Ann.Proc. 5, p.12) and in 1957 (1957 ICNAF Ann.Proc. 7, p.17). The Commission, therefore, adopted amendments to allow for the use of devices attached to the upper side of the codend in such a manner that they will not obstruct the meshes of the codend provided that they are approved by the Commission on the basis of scientific advice that they do not reduce the meshes or reduce significantly the selectivity of codends (1963 ICNAF Ann.Proc. 13, p.16-17). In addition, the Commission agreed that scientific evidence already reported by the Standing Committee on Research and Statistics would permit the use of the ICNAF-type chafer (Appendix B), the modified ICNAF-type chafer (Appendix C) and the multiple flap-type chafer (Appendix D) (1963 ICNAF Meeting Proc. 14 (with appendices) and 17). However, the Commission continued to press for gear technology studies and other

steps which would permit elimination of the use of topside chafing gear.

3. At its 1964 and 1965 Annual Meetings, the Commission noted that certain member countries were continuing experiments on further types of topside chafing gear with a view to submitting scientific evidence that they do not obstruct the meshes or reduce significantly the selectivity of the codend.

4. At its 1966 Annual Meeting, the Commission noted that, despite the use of less specific wording in the 1963 topside chafer proposals, certain member countries had again found it necessary to adopt these proposals with reservations. However, the Commission was pleased to note that a new Polish-type topside chafer (Appendix D) with a mesh size at least twice as large as the codend mesh size and a width at least as great as that of the codend fulfilled the requirements of the 1963 topside chafer proposals and that authorization of the Polish-type chafer would allow the withdrawal of all previous reservations and permit early ratification of the pending trawl regulations, and approved

- (1) the Polish-type topside chafer for the purpose of the Commission's recommendations, approved in 1963, when they enter into force;
- (2) the retention of the ICNAF-type topside chafer, the modified ICNAF-type topside chafer and the multiple flap-type topside chafer, approved in 1963, with periodic review of the scientific evidence for their retention;
- (3) the documentation, in readily accessible form, of the specifications for all Commission approved topside chafers.

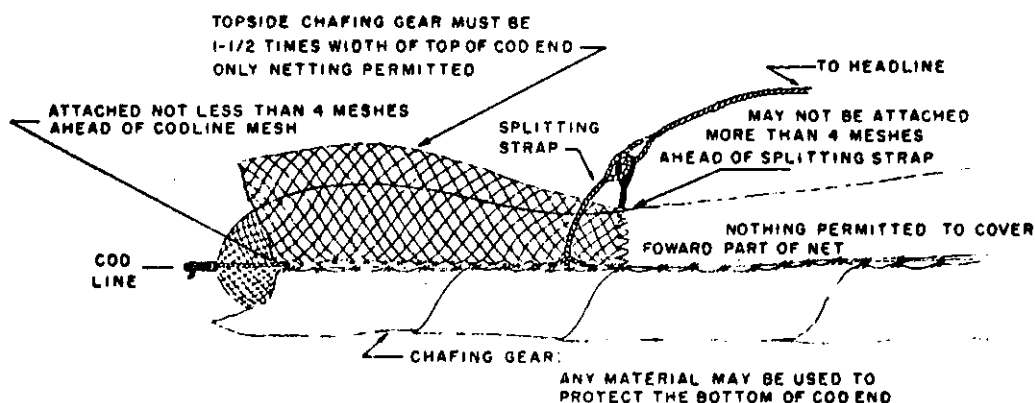
(1966 ICNAF Meeting Proc. 19 and 25 and
1966 ICNAF Ann.Proc. 16, p.19)

ICNAF-type topside chafer

Description

The ICNAF-type topside chafer, as described in the 1955 Commission proposals (amended in 1957) for Subareas 3, 4 and 5 and the 1961 proposals for Subareas 1 and 2, is a "rectangular piece of netting to be attached to the upper side of the cod-end of the trawl net to reduce and prevent damage so long as such netting conforms to the following conditions:

- (a) This netting shall not have a mesh size less than that specified [for the codends]. For the purposes of this subparagraph, the [specified] mesh size when measured wet after use shall be taken to be the average of the measurements of 20 consecutive meshes in a series across the netting, such measurements to be made with a like gauge inserted into the meshes as specified [for the codend mesh size measurements].
- (b) This netting may be fastened to the cod-end only along the forward and lateral edges of the netting and at no other place in it, and shall be fastened in such a manner that it extends forward of the splitting strap no more than four meshes and ends not less than four meshes in front of the cod line mesh.
- (c) The width of this netting shall be at least one and a half times the width of the area of the cod-end which is covered, such widths to be measured at right angles to the long axis of the cod-end."



Scientific Evidence for Authorization

Authorization of the use of the ICNAF-type topside chafer is based on scientific evidence presented to the Commission that it does not impair codend selectivity. Such evidence is recorded in papers by

- Clark, J.R. 1958. Underwater television observations on the effect of chafing gear on escapement of haddock. Annu. Proc. int. Comm. Northw. Atlant. Fish. 8: 101-102.
- McCracken, F.D. 1959. Topside chafing gear studies. Ibid. 9: 101-103.
1960. Selectivity of codends with various types of topside chafers. ICNAF Redbook 1960, p.66-69
- Bohl, H. 1966. (a) Recent selection experiments with the approved ICNAF topside chafer. ICNAF Res.Doc. 66/15.
1966. (b) The effect of the approved ICNAF topside chafer on codend selectivity. ICNAF Res.Doc. 66/29.

Modified ICNAF-type topside chafer

Description

The modified ICNAF-type topside chafer, as defined in Article 7(2) (ii) of the 1946 Convention for the Regulation of the Meshes of Fishing Nets and Size Limits of Fish, is described as follows:

"[...it shall not be deemed unlawful...]

(ii) to attach a rectangular piece of netting to the upper side of the cod-end of a trawl net to reduce and prevent damage so long as such netting conforms to the following conditions:

(a) this netting shall not have a mesh size less than that specified for the net itself;

(b) the netting may be fastened to the cod-end only along the forward and lateral edges of the netting and at no other place in it, and shall be fastened in such a manner that it extends forward of the splitting strop no more than four meshes and ends not less than four meshes in front of the cod-line mesh; where a splitting strop is not used the netting shall not extend to more than one-third of the cod-end measured from not less than four meshes in front of the cod-line mesh;

(c) the number of meshes in the width of the netting shall be at least one and a half times the number of meshes in the width of that part of the cod-end which is covered, both widths being taken at right angles to the long axis of the cod-end."

Note:

This topside chafer differs from the ICNAF-type chafer only in that it prescribes the extent of the topside chafer netting where a splitting strop is not used. See latter half of sub-paragraph (b) above.

Evidence for Authorization

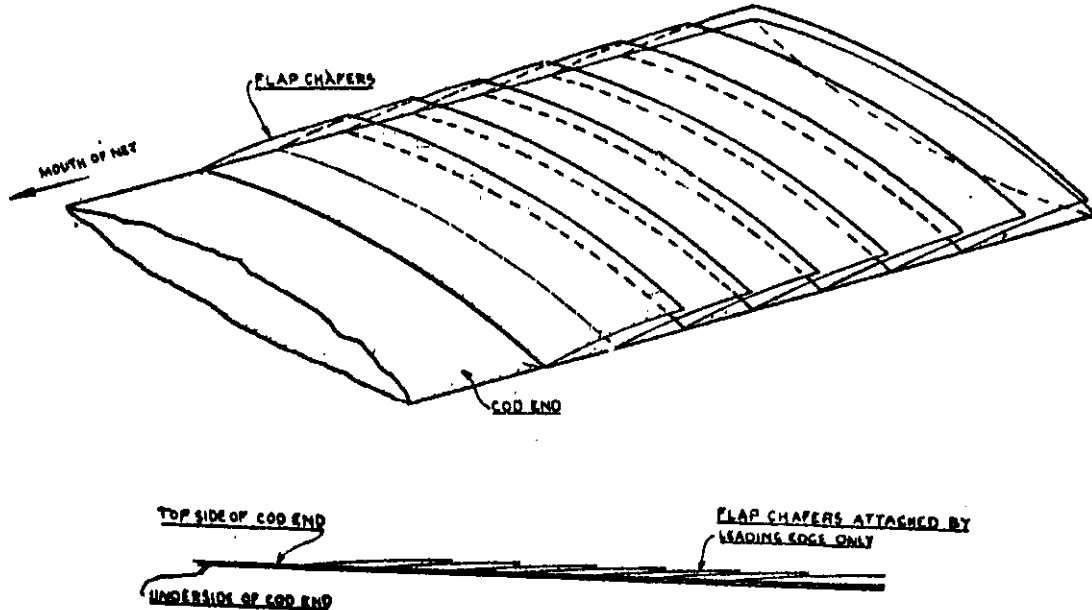
Article 7 of the 1946 Convention for Regulation of the Meshes of Fishing Nets and the Size Limits of Fish, amended to May 1963, also 1963 ICNAF Meeting Proceedings No.14, App.1, Annexes 1 and 2.

Multiple-flap type topside chafer

Description

The multiple-flap type topside chafer is defined in the United Kingdom statutory regulations as "pieces of netting have in all their parts meshes the dimensions of which, whether the pieces of netting are wet or dry, are not less than those of the meshes of the net to which they are attached: provided that:

- (i) each piece of netting
 - (a) is fastened by its forward edge only across the cod-end at right angles to its long axis;
 - (b) is of a width of at least the width of the cod-end (such width being measured at right angles to the long axis of the cod-end at the point of attachment), and
 - (c) is not more than ten meshes long; and
- (ii) the aggregate length of all the pieces of netting so attached does not exceed two-thirds of the length of the cod-end."



Scientific Evidence for Authorization

- Beverton, R.J.H. 1964. Selectivity of a modified form of top-side chafer. ICES Comparative Fishing Committee, 1959, Paper 117
Selectivity of a flap-type of top-side chafer. ICNAF Redbook 1964, Part III, p.132-139
- McCracken, F.D. 1960. Selectivity of cod-ends with various types of topside chafer. 1960 ICNAF Meeting Doc. No.19

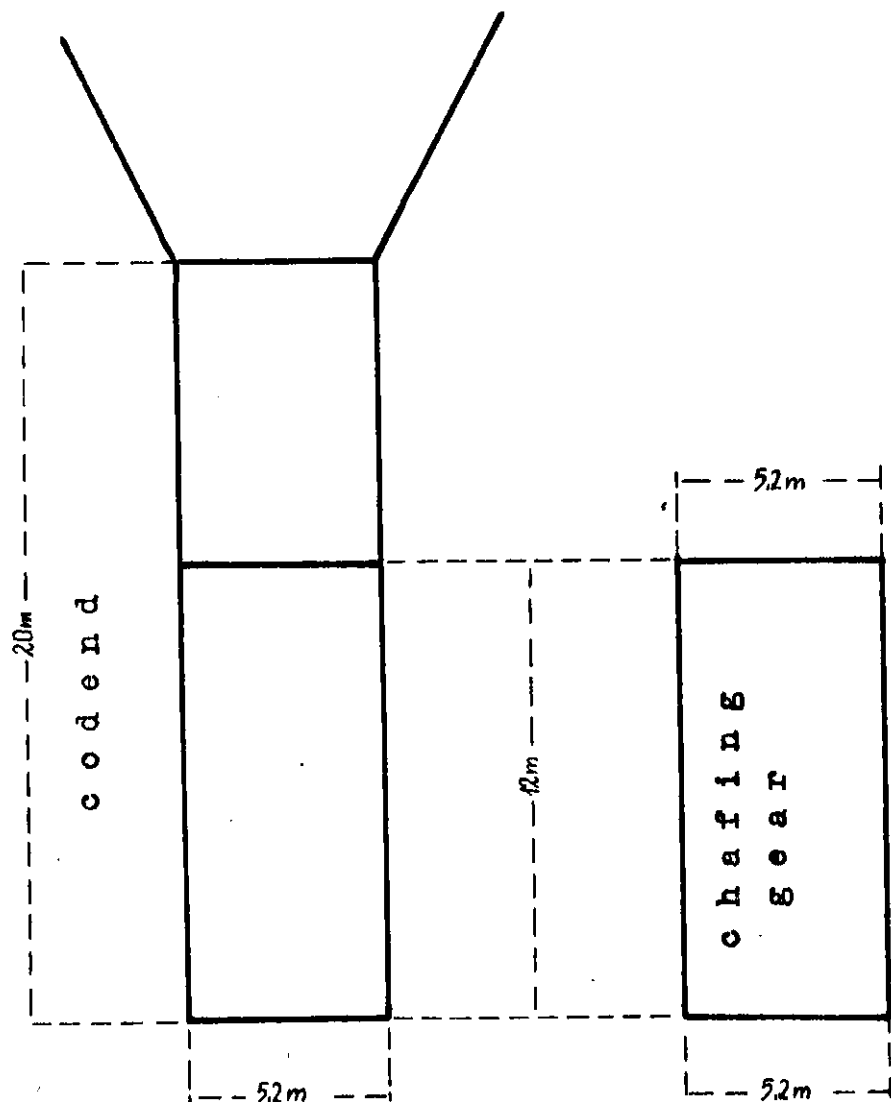
Polish-type Topside Chafer

Description

The Polish-type topside chafer, as proposed by the Polish delegation and approved by the Commission at the 1966 Annual Meeting, consists, in general, of a rectangular piece of netting attached to the rear portion of the upper side of the codend. The chafer netting has a mesh size twice as large as the mesh size of the codend and has a width the same as that of the codend. The netting is fastened to the codend only along the forward, lateral and rear edges of the netting in such a way as to secure that the meshes of the netting exactly overlap the meshes of the codend. The netting is made of the same twine material and size as that of the codend.

A detailed description of the chafer tested by Poland and approved by the Commission is given by W. Strzyzewski of the Sea Fisheries Institute, Gdynia, Poland, in his paper "The effect of use of chafing gear on selection factor" (ICNAF Res.Doc.66/21 and ICNAF Redbook 1966, Pt.III, p.112-121) and by

Fig. 1
Polish-type
topside chafer



Dr F. Chrzan of the Sea Fisheries Institute, Gdynia, Poland, in his letter of 28 November 1966 to the ICNAF Secretariat. The chafer tested was 12 m long by 5.2 m wide and was attached to the rear portion of a codend 20 m long by 5.2 m wide (Fig.1). Both the codend and chafer were made of double stylon (stylon = Polish polyamide) twine each 3.5 mm in diameter. Mesh size of the codend netting was 117.6 mm and of the chafer 235.2 mm as measured wet after use by the ICNAF gauge at a pressure of 4 kg. Details of the manner in which the chafer is fitted along its forward, lateral and rear edges to the codend is shown in Fig. 2G, 2B and 2D respectively.

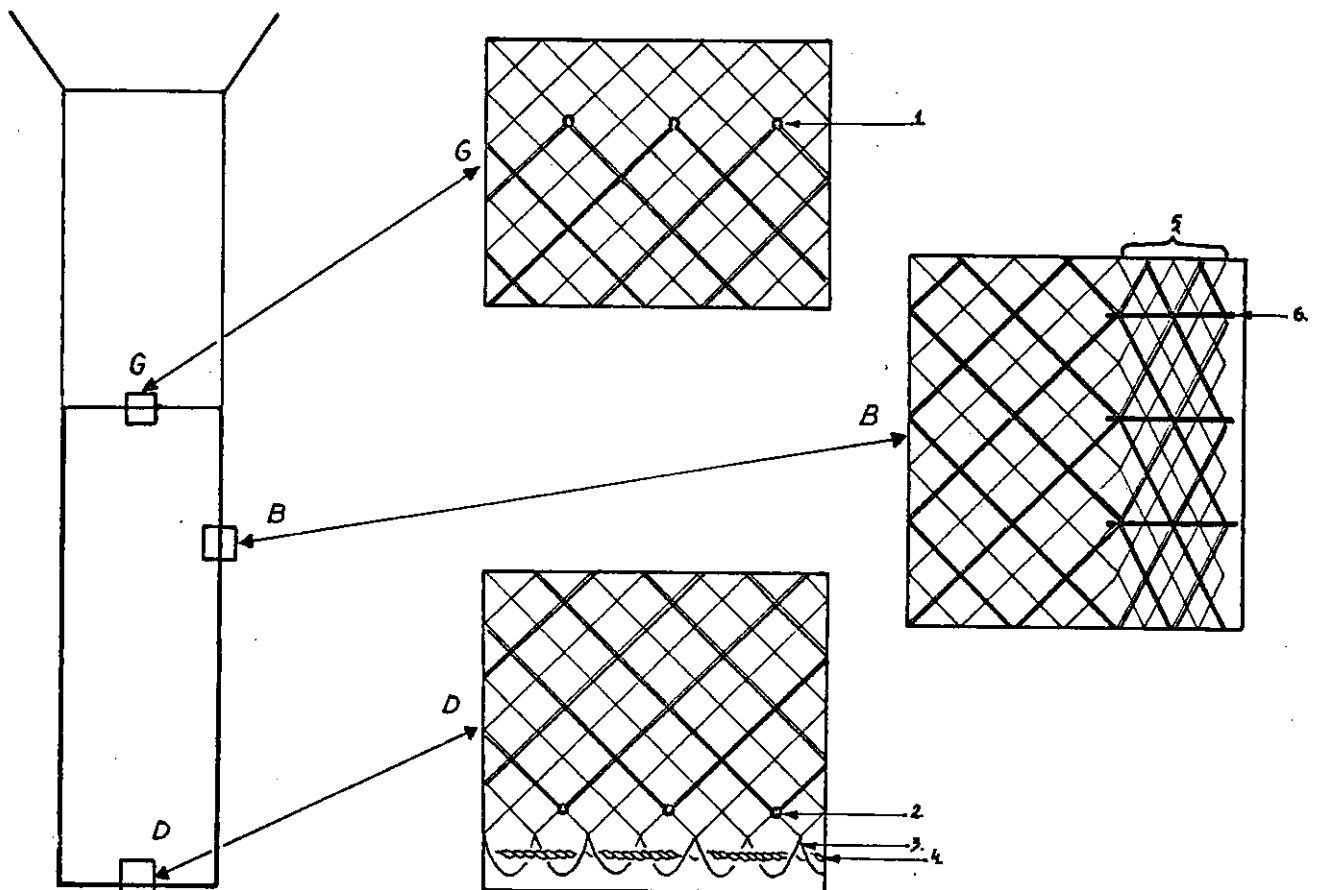


Fig. 2. Polish-type Topside Chafer

Scientific Evidence for Authorization

Authorization of the use of the Polish-type topside chafer is based on scientific evidence presented to the Commission at its 1966 Annual Meeting that it does not obstruct the meshes of the codend or reduce significantly the codend selectivity. Such evidence is recorded in a paper by

Strzyzewski, W. 1966. The Effects of the Use of Chafing Gear on Selection Factor. 1966 ICNAF Res.Doc.66/21 and ICNAF Redbook 1966, Pt.III, p.112-121.
(Selection factor for cod with no chafer = 3.92;
selection factor for cod with Polish-type chafer = 3.77)