

RESEARCH

IN SERVICE LABORATORIES

April 1952

COMPOSITION: Cold-Storage Life and Composition of Fresh-water Fish: Data on the composition of additional samples of whitefish and Lake Michigan smelt are shown in the following tables.

Table 1 - Composition of Edible Portion of Whitefish (*Coregonus clupeaformis*)

Sample Number	Length of Fish Centimeters	Weight of Fish Grams	Fillet Yield From Whole Fish Percent	Proximate Composition of Edible Portion			
				Moisture Percent	Fat Percent	Protein Percent	Ash Percent
13	48	1250	54	71.5	9.9	18.4	1.09
14	46	1065	52	70.1	11.4	19.3	1.21
15	48	1505	38	72.5	6.1	18.9	1.12
16	47	1110	54	72.9	6.1	19.1	1.22

Table 2 - Composition of Edible Portion of Lake Michigan Smelt (*Osmerus mordax*)

Sample Number	Proximate Composition of Edible Portion				Sample Number	Proximate Composition of Edible Portion			
	Moisture Percent	Fat Percent	Protein Percent	Ash Percent		Moisture Percent	Fat Percent	Protein Percent	Ash Percent
1	79.9	3.34	18.1	0.96	9	78.7	2.92	17.8	1.09
2	80.1	2.58	17.7	1.04	10	77.3	2.77	18.6	1.20
3	79.7	3.40	17.5	1.04	11	77.2	2.94	18.9	1.20
4	79.6	2.00	17.9	1.04	12	79.6	2.40	18.8	1.05
5	79.8	1.62	18.3	1.03	13	78.8	2.15	19.5	1.10
6	80.3	1.52	18.3	1.04	14	79.2	2.03	19.6	1.04
7	79.8	2.38	17.8	1.04	15	81.7	2.01	19.7	0.98
8	78.8	2.30	18.1	1.04	16	78.3	2.59	20.0	1.01

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BIBLIOGRAPHY: The Seattle Fishery Technological Laboratory has prepared a complete subject and author index of all its publications covering the period from 1935 to 1951. A limited supply of this index is available for distribution to the fishing industry, research organizations, and libraries. Requests for the index should be sent directly to the Fishery Technological Laboratory, 2725 Montlake Boulevard, Seattle 2, Washington.

(Seattle)



TECHNICAL NOTE NO. 20--FEDERAL SPECIFICATIONS FOR FISHERY PRODUCTS

Recent revisions of obsolete Federal specifications for fishery products have brought forth many questions from members of the fishery industries regarding the preparation, publication, and use of these specifications. The purpose of this report is to answer all the various questions in this regard.

What is a fish specification? A Federal fish specification is a definite, accurate, and complete statement of the technical requirements for a particular fishery product and the procedures to be followed in determining compliance with these requirements.

Why are specifications issued? Specifications are prepared as needed to meet the requirements of two or more Federal agencies for the purchase of fishery food items. They are in general use throughout the Government agencies.

Who is responsible for preparing and issuing Federal Fish Specifications? Federal fish specifications are prepared and published under the direction of the Federal Specifications Board through its various technical committees. Sections 1 through 6 of the specifications are drafted by the Provisions Technical Committee; Section 7 (Armed Forces Requirements) is drafted by the Quartermaster Food and Container Institute for the Armed Forces.

The Provisions Technical Committee is composed of representatives of each of the various departments of the Federal Government. The Department of the Interior is represented on this Committee by the Chief (as member) and the Assistant Chief (as alternate member) of the Technological Section, Branch of Commercial Fisheries. The member also serves as Chairman of the Fishery Products Subcommittee. As such he is responsible for directing the activities regarding the preparation of the specifications for fishery products.

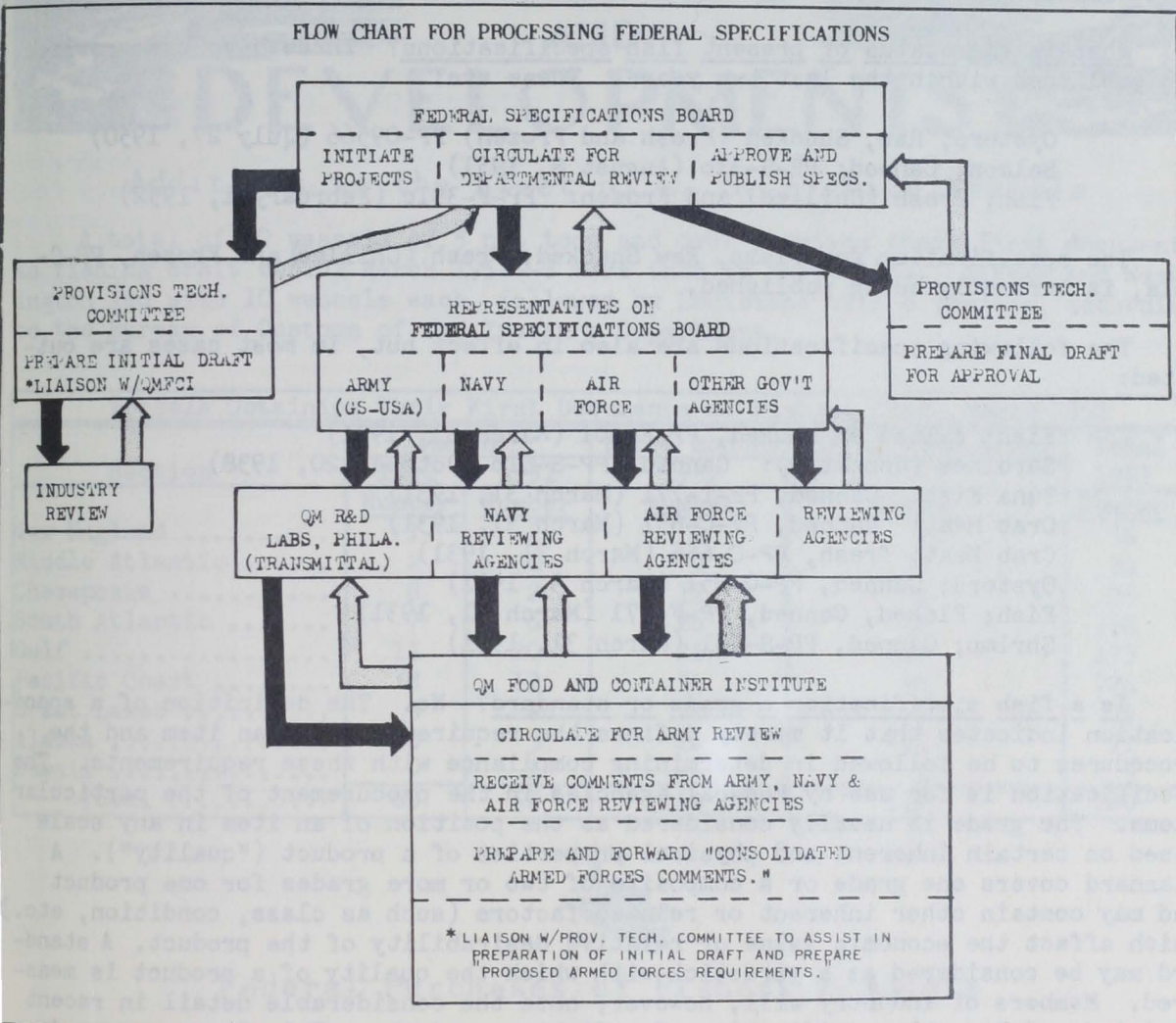
What is an "Interim Specification?" An interim specification is prepared for temporary use and may be used by Federal agencies in making procurements until the regular coordinated specification is promulgated.

Who uses the fishery specifications? The specifications are prepared and issued for use by the Federal Government. Other government agencies, such as State, County, and City, often adopt and use the Federal specifications. Also, private concerns, such as hotels, restaurants, steamship and railroad lines, and other institutions, find Federal specifications of considerable aid in the purchase of edible fishery products in accordance with their requirements.

What is the procedure for processing a fish specification? The following are basic steps in the procedure for processing specifications:

1. A request for a specification is made by the Federal agencies.
2. Initiation of the project by the Federal Specifications Board.
3. Preparation of the initial draft of the Federal specification.
4. Preparation of the Interim Specification.
5. Circulation of the draft for review.
6. Reconciliation of comments.
7. Preparation of the final draft.
8. Approval, printing, and distribution of the final specification.

What part does the industry play in the preparation of Federal Fish Specifications? Whenever possible, depending on Federal requirements, the fish specifications should represent the commercial items currently available on the market.



As explained earlier, the specification merely defines the requirements for a particular item. All fish specifications are sent to industry for review and comments. These comments are studied by the Provisions Technical Committee members and all practical and logical changes are incorporated into the specification. The basic requirements of the various Federal agencies are, however, maintained.

It is interesting to note at this point that submission for industry review of the recent specifications for clams and fish brought forth only a very few practical changes. Most of the comments were of a general nature and some did not apply to the specifications in question. Specific and clear comments and criticisms from the industry, particularly through the various trade organizations, regarding the Federal specifications, are definitely appreciated and will be thoroughly considered in the preparation or revision of any fish specification. These comments should be submitted direct, or through a trade organization, to the Technical Section, Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington, D. C.

Can Federal Specifications be changed? Specifications which may contain possible errors, which do not reflect the latest technological advancements, or which do not meet the requirements of the Federal agencies may be revised or amended. Both procedures follow the basic steps in procedure for processing specifications.

What is the status of present fish specifications? Three have been revised and published within the last two years. These are:

Oysters, Raw, Shucked (Fresh and Frozen) PP-09566 (July 27, 1950)
 Salmon, Canned; PP-S-31b (August 8, 1951)
 Fish; Fresh (Chilled) and Frozen: PP-F-381c (February 1, 1952)

The specification for Clams, Raw Shucked; Fresh (Chilled) and Frozen, PP-C-401a, is currently being published.

The following specifications are also in effect but, in most cases are outdated:

Fish; salted or smoked, PP-F-401 (March 31, 1931)
 Sardines (domestic): Canned, PP-S-51b (October 20, 1938)
 Tuna Fish: Canned, PP-T-771 (March 31, 1931)
 Crab Meat: Canned, PP-C-651 (March 31, 1931)
 Crab Meat; fresh, PP-C-656 (March 31, 1931)
 Oysters; Canned, PP-O-951 (March 3, 1931)
 Fish; Flaked, Canned, PP-F-371 (March 31, 1931)
 Shrimp; Canned, PP-S-331 (March 31, 1931)

Is a fish specification a grade or standard? No. The definition of a specification indicates that it merely defines the requirements for an item and the procedures to be followed in determining compliance with these requirements. The specification is for use by Federal agencies in the procurement of the particular items. The grade is usually considered as the position of an item in any scale based on certain inherent and physical properties of a product ("quality"). A standard covers one grade or a composite of two or more grades for one product and may contain other inherent or related factors (such as class, condition, etc.) which affect the economic value or relative desirability of the product. A standard may be considered as a yardstick with which the quality of a product is measured. Members of industry will, however, note the considerable detail in recent revisions of Federal specifications for fishery products. This is necessary due, in part, to the lack of standards for these items.

A good example of the problems involved in the preparation of a specification for which there is no standard presented itself in the preparation of the specification for Clams, Raw, Shucked; Fresh (Chilled) and Frozen. In setting up the size designations for the various classes of clams, it was found that not only did the size designations vary for each locality but they varied widely from plant to plant within each locality.

Summary. A Federal Fish Specification is a definite, accurate, and complete statement of the technical requirements of the particular item and the procedure to be followed in determining compliance with the requirements. It is prepared and published by the Federal Specifications Board at the request of and for the use of Federal agencies. It is ordinarily designed to cover existing commercial products, depending upon the specific requirement of the agencies. It is published only after complete review by the various Government agencies and the fishery industries.

NOTE: MUCH OF THE MATERIAL FOR THIS TECHNICAL NOTE, INCLUDING THE FLOW CHART FOR PROCESSING FEDERAL SPECIFICATIONS, WAS OBTAINED FROM A REPORT OF THE QUARTERMASTER CORPS FOOD AND CONTAINER INSTITUTE FOR THE ARMED FORCES ON THE SUBSISTENCE SPECIFICATION PROGRAM.
