

Northwest Atlantic



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Provisional Index and List of Titles of Research  
and Summary Documents for 1990

by

NAFO Secretariat

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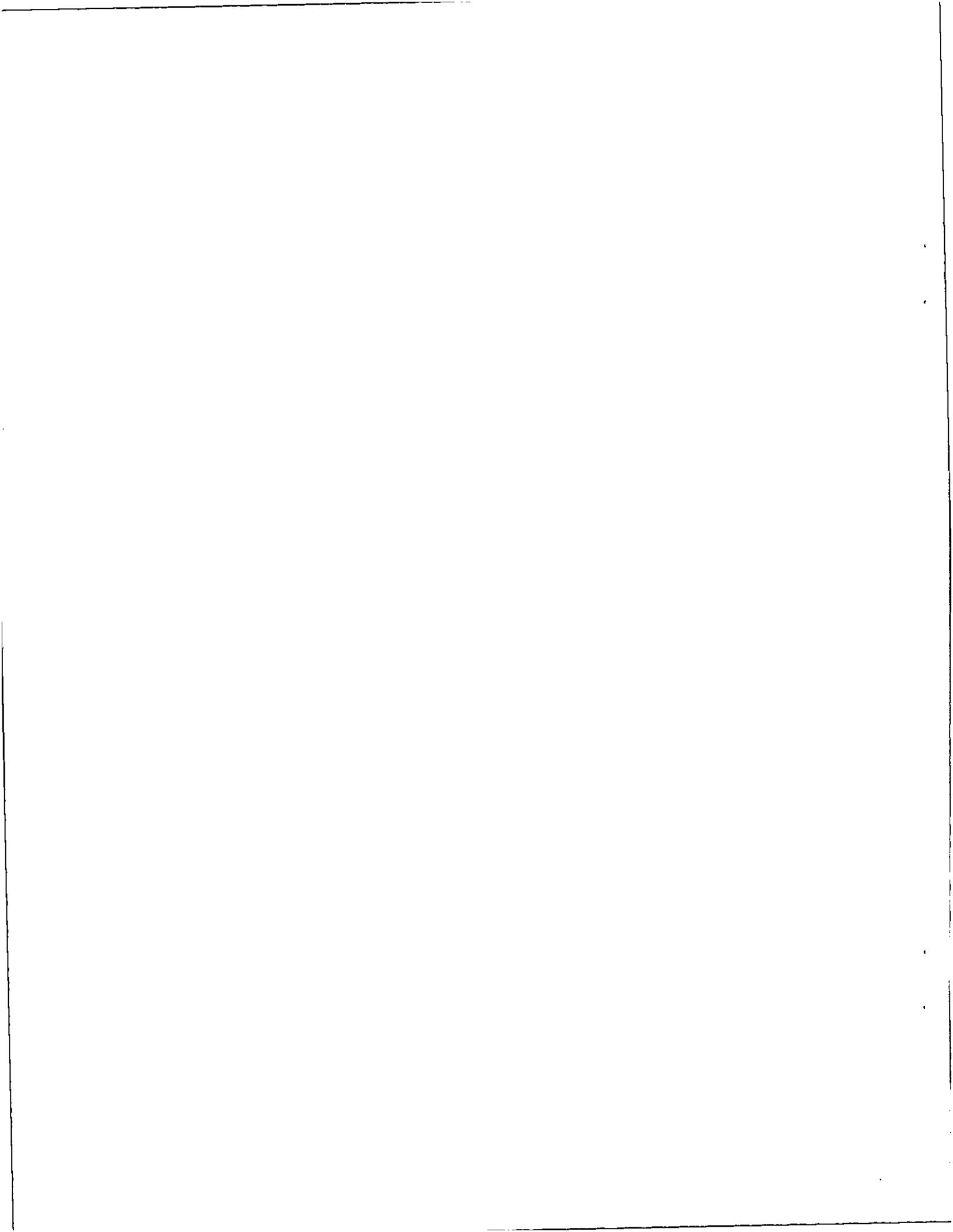
Introduction

The Scientific Council has agreed that research (SCR) and summary (SCS) documents should be indexed on an annual basis and that these provisional indexes be combined for publication at 5-year intervals. The first NAFO issue of Index of Meeting Documents for 1979-84 was published in March 1985. The second NAFO issue of Index of Meeting Documents for 1985-89 was published in February 1991. This provisional index relates to all SCR documents (No. 1-115) and SCS documents (No. 1-25) for the calendar year 1990.

The list of SCR and SCS documents for 1990 in the first section of this document maintains the previous format and is arranged by consecutive document number.

Compilation of the 1990 author index generally follows guidelines that were used in preparing the Index of Meeting Documents for 1979-84 and 1985-89. Each of the research and summary documents is identified by its 3-character code (i.e. SCR or SCS), followed by the last two digits of the year of issue, an oblique (/), and then the designated document number. This is followed in parentheses by a shortened version of the title or an expression which indicates the object of the referenced paper.

The 1990 subject index follows the same format as the author index. However, it differs from subject indexes prior to 1988 in that the text between parentheses is not altered from that used in the author index.



## LIST OF RESEARCH AND SUMMARY DOCUMENTS, 1990

## RESEARCH DOCUMENTS (SCR)

<u>SCR No.</u>	<u>Ser. No.</u>	
90/01	N1701	<u>SHERSTJUKOV, A. I.</u> Distribution and abundance of 0-group silver hake on the Scotian Shelf in autumn 1988. (16 pages)
90/02	N1702	<u>SHERSTJUKOV, A. I.</u> The young silver hake growth in the Scotian area, 1977-1988. (11 pages)
90/03	N1706	<u>TIZOL, R., M. ISAAC, and G. ARENCIBIA.</u> Age determination of silver hake by chemical composition of otoliths. (5 pages)
90/04	N1707	<u>FUONG, N.</u> More on the question of inconsistencies in studying the Scotian Shelf silver hake growth rate by Soviet and Canadian scientists. (13 pages)
90/05	N1716	<u>BULATOVA, A. Yu.</u> Assessment of the cod stock in Div. 3NO and 3KL from the 1989 trawl-acoustic survey. (14 pages)
90/06	N1717	<u>SAVVATIMSKY, P. I.</u> Variations in catch composition of roundnose grenadier from the Northwest Atlantic during 1971-1989. (16 pages)
90/07	N1718	<u>BAKANEV, V. S., A. A. VASKOV, and V. N. PETROV.</u> Results of the Soviet acoustic survey on capelin stock in summer 1989 and 0-group capelin survey in autumn 1988 and 1989 in Div. 3LNO. (10 pages)
90/08	N1719	<u>VASKOV, A. A., A. G. GALUZO, and I. A. OGANIN.</u> Estimation of the stock status and TAC for redfish, <i>Sebastes marinus</i> in Div. 3M for 1991. (15 pages)
90/09	N1720	<u>VASKOV, A. A., A. G. GALUZO, and I. A. OGANIN.</u> Estimation of the stock status and TAC for redfish, <i>Sebastes marinus</i> in Div. 3LN for 1991. (16 pages)
90/10	N1721	<u>BOROVKOV, V. A., and I. I. TEVS.</u> Overview of oceanographic conditions off the Northwest Atlantic in 1989. (22 pages)
90/11	N1723	<u>SMEDSTAD, O. M., and S. TORHEIM.</u> Norwegian investigations on shrimp ( <i>Pandalus borealis</i> ) in East Greenland waters in 1989. (13 pages)
90/12	N1724	<u>SMEDSTAD, O. M.</u> Preliminary report of a cruise with M/T <i>Håkøz-II</i> to East Greenland waters in September 1989. (13 pages)
90/13	N1728	<u>MOUNTAIN, D. G., and T. J. HOLZWARTH.</u> Surface and bottom temperature and temperature anomaly time series from the Northeast Fisheries Center spring and fall bottom trawl survey program, 1963-1989. (20 pages)
90/14	N1729	<u>SIGAEV, I. K.</u> Ecological studies of conditions of silver hake distribution on Nova Scotian Shelf within the framework of the USSR-Canada program. (31 pages)
90/15	N1730	<u>RIKHTER, V. A.</u> The stock-recruitment dependence nature in some fish species from the Northwest Atlantic. (34 pages + Corrigendum)
90/16	N1733	<u>STEIN, M.</u> Some remarks on time-series on annual intervals. (6 pages)
90/17	N1734	<u>STEIN, M.</u> Variation of salt and heat flow in West Greenland waters. (8 pages)
90/18	N1735	<u>RIKHTER, V. A., and V. F. TUROK.</u> Dependence between stock size and concentration densities for Scotian Shelf silver hake by USSR observers' data for 1979 through 1988. (11 pages)
90/19	N1736	<u>RIKHTER, V. A., and V. F. TUROK.</u> Distribution of silver hake, other fish species and squid on the Nova-Scotian Shelf in 1989 by USSR observers' data. (21 pages)
90/20	N1737	<u>WALDRON, D. E., M. C. BOURBONNAIS, and M. A. SHOWELL.</u> Status of the Scotian Shelf silver hake (Whiting) populations in 1989. (27 pages)
90/21	N1738	<u>WALDRON, D. E., M. A. SHOWELL, and P. A. COMEAU.</u> Scotian Shelf silver hake: 1989 commercial fishery description. (19 pages)
90/22	N1739	<u>CÁRDENAS, E. de, and J. A. PEREIRO.</u> Some comments about the exploitation pattern on the Flemish Cap cod stock. (6 pages)
90/23	N1740	<u>BAIRD, J. W., C. A. BISHOP, and E. F. MURPHY.</u> Cod in Divisions 2J+3KL - information relative to the portion of the stock beyond the Canadian 200-mile fishery zone. (11 pages)

SCR Documents (continued)

- 90/24 N1741 STROUT, G. Variation in the shelf water front position in 1989 from Georges Bank to Cape Hatteras. (9 pages)
- 90/25 N1742 SANO, M. H., and G. B. WOOD. Anticyclonic warm-core Gulf Stream rings off the northeastern United States during 1989. (16 pages)
- 90/26 N1743 JOSSI, J. W., and R. L. BENWAY. Surface and bottom temperatures, and surface salinities: Massachusetts to Cape Sable, N.S., and New York to the Gulf Stream, 1988. (18 pages)
- 90/27 N1744 JOSSI, J. W., and R. L. BENWAY. Surface and bottom temperatures, and surface salinities: Massachusetts to Cape Sable, N.S., and New York to the Gulf Stream, 1989. (17 pages)
- 90/28 N1745 RIGET, F., HOVGÅRD, H., and H. LASSEN. A catch rate index for West Greenland Cod for 1975-89 based on logbook information from the commercial fleet. (11 pages)
- 90/29 N1746 HOVGÅRD, H., and F. RIGET. A long-line estimate of swept area abundance of cod in inshore areas off West Greenland. (12 pages)
- 90/30 N1747 HOVGÅRD, H., and K. H. NYGAARD. Young cod distribution and abundance in West Greenland inshore areas, 1989. (6 pages)
- 90/31 N1748 RÄTZ, H-J. The effect of emigration on VPA-assessments of Subarea 1 cod. (11 pages)
- 90/32 N1749 WIELAND, K., and B. BRÜGGE. Some considerations on the significance of larval drift for the recruitment of West Greenland cod. (6 pages)
- 90/33 N1750 KÖSTER, F. W., and W. SCHÖBER. Cod stomach sampling in West Greenland waters 1989 - some preliminary results. (13 pages)
- 90/34 N1751 RÄTZ, H-J. The assessment of the migration of Atlantic cod (*Gadus morhua* L.) between the stocks off East and West Greenland by means of otolith typing. (42 pages)
- 90/35 N1752 BOJE, J., and O. JØRGENSEN. On the relevance of a combined assessment of Greenland halibut in NAFO Subareas 0, 1, 2 and Divisions 3KL. (7 pages)
- 90/36 N1753 BOJE, J., F. RIGET, and M. KØIE. Infestation of parasites in Greenland halibut in the Northwest Atlantic. (18 pages)
- 90/37 N1754 BOJE, J. On recaptures of Greenland halibut in Icelandic waters from tagging experiments in West Greenland fjords. (2 pages)
- 90/38 N1755 NIELSEN, J. R. Longline fishery for Greenland halibut in the Davis Strait, November 1989. (4 pages)
- 90/39 N1756 JØRGENSEN, O., and K. AKIMOTO. Results of a stratified-random bottom trawl survey in NAFO Subarea 1 in 1989. (14 pages)
- 90/40 N1757 P-GANDARAS, G., and J. ZAMARRO. Changes in the cohort growth rate of Flemish Cap cod. (14 pages)
- 90/41 N1758 ZAMARRO CEBALLOS, J. Determination of fecundity in American plaice (*Hippoglossoides platessoides*) and its variation from 1987 to 1989. (10 pages)
- 90/42 N1759 CARLSSON, D. M., and P. KANNEWORFF. The commercial shrimp fishery in Denmark Strait in 1989 and early in 1990. (22 pages)
- 90/43 N1760 REINERT, J. The Faroese longline fishery for cod on Flemish Cap 1973-88, data on catch and effort from three longliners. (4 pages)
- 90/44 N1761 LUND, H. Greenland fishery for shrimp (*Pandalus borealis*) at north West Greenland from 1985 to 1989. (12 pages)
- 90/45 N1762 FRÉCHET, A., and E. LABERGE. New strata for groundfish surveys in the Gulf of St. Lawrence, NAFO Divisions 4RST. (2 pages)
- 90/46 N1763 CARLSSON, D. M., P. KANNEWORFF, and K. M. LEHMANN. Report on a stratified-random trawl survey for shrimp (*Pandalus borealis*) in NAFO Subareas 0+1 in July-August 1989. (16 pages)
- 90/47 N1764 ESCALANTE, J. L., J. VÁZQUEZ, and I. MENA. Northern prawn (*Pandalus borealis*) stock in Flemish Cap. (6 pages)

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- 90/48 N1765 GASSUIKOV, P. S. Practical use of adaptive framework for stock assessment. (11 pages)
- 90/49 N1766 GASSUIKOV, P. S. Silver hake stock assessment in the 4VWX NAFO Subareas without age data use. (17 pages)
- 90/50 N1767 GASSUIKOV, P. S. Application of multiplicative model for fishing effort standardization in a special case. (14 pages)
- 90/51 N1772 BOWERING, W. R., W. B. BRODIE, and J. W. BAIRD. An assessment of the Greenland halibut stock component in NAFO Subarea 2 and Divisions 3K and 3L. (21 pages, revised)
- 90/52 N1773 CHUMAKOV, A. K., G. B. RUDNEVA, P. ERNST, and H. MÜLLER. Status of Greenland halibut (*Reinhardtius hippoglossoides* Walb.) stocks and feasible yield in NAFO Subareas 0, 1 and Div. 2GH. (18 pages)
- 90/53 N1774 KUZMIN, S. A. Stock assessment, age-length composition and maturity stages of the Flemish Cap cod. (16 pages)
- 90/54 N1775 BOWERING, W. R. Witch flounder in Divisions 3NO. (6 pages)
- 90/55 N1776 RIGET, F. Data and preliminary assessment of Subarea 1 cod. (12 pages)
- 90/56 N1777 CHRISTENSEN, S., and H. LASSEN. Selection in shrimp trawl. (3 pages)
- 90/57 N1778 BOWERING, W. R., and A. K. CHUMAKOV. Estimates of abundance and biomass of witch flounder (*Glyptocephalus cynoglossus*) in Div. 3NO and Greenland halibut (*Reinhardtius hippoglossoides*) in Div. 3KL from USSR groundfish surveys during 1987-89. (7 pages)
- 90/58 N1779 LEHMANN, K. M., and P. KANNEWORFF. Report on a stratified-random trawl survey for shrimp (*Pandalus borealis*) in ICES Subarea XIV b. (9 pages)
- 90/59 N1780 NAKASHIMA, B. S. Capelin school surface area index for NAFO Div. 3L during the 1989 spawning season. (6 pages)
- 90/60 N1781 NAKASHIMA, B. S., and R. W. HARNUM. The inshore capelin fishery in NAFO Div. 3L in 1989. (14 pages)
- 90/61 N1782 MILLER, D. S., and J. E. CARSCADDEN. A biomass estimate from a hydroacoustic survey for capelin (*Mallotus villosus*) in NAFO Division 3N and observations on the Soviet fishery for capelin in Divisions 3NO. (5 pages)
- 90/62 N1784 LEHMANN, K. Report on a commercial trial fishery for shrimp (*Pandalus borealis*) off Southwest, Southeast and East Greenland. (6 pages)
- 90/63 N1785 LUND, H. Fecundity of shrimp (*Pandalus borealis*) sampled on fishing grounds at North West Greenland and West Greenland. (7 pages)
- 90/64 N1786 CARLSSON, D. M. Data and preliminary assessment of shrimp in Denmark Strait. (7 pages)
- 90/65 N1787 CARLSSON, D. M. Data and preliminary assessment of shrimp in Subareas 0+1. (9 pages, revised)
- 90/66 N1788 JOSSI, J. W., and D. E. SMITH. Continuous plankton records: Massachusetts to Cape Sable, N.S., and New York to the Gulf Stream, 1989. (11 pages)
- 90/67 N1789 NARAYANAN, S., E. B. COLBOURNE, and C. FITZPATRICK. Frontal oscillations on the NE Newfoundland shelf. (15 pages)
- 90/68 N1790 VAZQUEZ, A. Results from bottom trawl survey of Flemish Cap in July 1989. (25 pages)
- 90/69 N1791 ZAMARRO, J., and W. B. BRODIE. Results of an American plaice (*Hippoglossoides platessoides*) otolith exchange between Canada and Spain. (6 pages)
- 90/70 N1792 BOWERING, W. R., and A. K. CHUMAKOV. Trends in biomass and abundance estimates of yellowtail flounder (*Limanda ferruginea*) from USSR surveys in Divisions 3LNO. (11 pages)
- 90/71 N1793 BOWERING, W. R., and A. K. CHUMAKOV. Trends in biomass and abundance estimates of American plaice (*Hippoglossoides platessoides*) from USSR surveys in Divisions 3K, 3L, 3M, 3N and 3O. (18 pages)

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- 90/72 N1794 BISHOP, C. A., E. F. MURPHY, and J. W. BAIRD. Biomass and age compositions derived from RV surveys for cod in Div. 3NO relative to the Canadian 200-mile fishery boundary. (6 pages)
- 90/73 N1795 BISHOP, C. A., J. W. BAIRD, and E. F. MURPHY. The assessment of the cod stock in NAFO Div. 3NO. (35 pages)
- 90/74 N1796 RIGET, F. Status of Subarea 1 cod and the fisheries. An extract of the Report of the ICES Working Group on cod stocks off East Greenland, Hamburg, 21-27 February 1990 and revision of the 1989 trawl survey abundance estimates. (22 pages)
- 90/75 N1797 SAVVATIMSKY, P. I., G. B. RUDNEVA, L. DANKE, H. MÜLLER, D. B. ATKINSON, and D. POWER. Roundnose grenadier (*Coryphaenoides rupestris*) in NAFO Subareas 0+1 and 2+3. (46 pages)
- 90/76 N1798 WALSH, S. J. Distribution of juvenile and adult American plaice on the Grand Bank, NAFO Divisions 3LNO. (19 pages)
- 90/77 N1799 BUCH, E., and P. B. NIELSEN. Ocean temperatures at Fyllas Bank, West Greenland related to atmospheric processes. (8 pages)
- 90/78 N1800 STEIN, M. Greenhouse induced changes in the North Atlantic - implications for fisheries. (12 pages)
- 90/79 N1801 FUCHS, F. Proposal for a multinational project on the coordination of fishery hydrographic activities in the North Atlantic. (3 pages)
- 90/80 N1802 BRODIE, W. B., W. R. BOWERING, and J. W. BAIRD. An assessment of the American plaice stock in Divisions 3LNO. (32 pages)
- 90/81 N1803 ZAMARRO, J. An assessment of the American plaice stock on the Flemish Cap (NAFO Division 3M). (4 pages)
- 90/82 N1804 SKÚLADÓTTIR, U. A review of the shrimp fishery (*Pandalus borealis*) in the Denmark Strait, in the years 1978-1989. (14 pages)
- 90/83 N1806 DRINKWATER, K. F., and R. W. TRITES. Overview of environmental conditions in the Northwest Atlantic in 1989. (19 pages)
- 90/84 N1809 KEELEY, J. R. Marine Environmental Data Service Report for 1989. (11 pages)
- 90/85 N1811 WALSH, S. J. Distribution of juvenile and adult yellowtail flounder on the Grand Bank, NAFO Divisions 3LNO. (14 pages)
- 90/86 N1812 BRODIE, W. B., S. J. WALSH, and W. R. BOWERING. Yellowtail flounder in NAFO Div. 3LNO - an assessment of stock status. (24 pages)
- 90/87 N1813 POWER, D., and D. B. ATKINSON. Status of the redfish resource in NAFO Divisions 3LN. (18 pages)
- 90/88 N1814 MESSTOREF, J., and H. P. CORNUS. Survey biomass and abundance for redfish (*Sebastes marinus* and *S. mentella*) off West Greenland (NAFO Subarea 1, 1989). (4 pages)
- 90/89 N1815 FRÉCHET, A. The Saint-Pierre and Miquelon and Metropolitan France cod fishery (3Pn, 4RS) in the Gulf of St. Lawrence from 1978 to 1989. (18 pages)
- 90/90 N1817 LASSEN, H., and D. M. CARLSSON. A catch-rate index for the Greenland shrimp fishery in NAFO Subarea 1. (14 pages)
- 90/91 N1818 SKÚLADÓTTIR, U. The sustainable yield of *Pandalus borealis* in the Denmark Strait area based on data for the years 1980-89. (5 pages)
- 90/92 N1824 SABORIDO, F., and J. PAZ. Distribution and abundance of cod on the Flemish Cap, July 1988 and 1989. (12 pages)
- 90/93\* N1828 FRANCIS, R. I. C. C. Risk analysis in fishery management. (18 pages)
- 90/94\* N1829 PRAGER, M. H., and C. D. JONES. Effects of growth variability on estimation of the biological reference point  $F_{0.1}$ , with examples from Chesapeake Bay, USA. (14 pages)
- 90/95\* N1830 COOK, R. M., P. A. KUNZLIK, and R. J. FRYER. On the quality of North Sea cod stock forecasts. (5 pages)

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- 90/96\* N1831 SINCLAIR, A., D. GASCON, R. O'BOYLE, D. RIVARD, and S. GAVARIS. Consistency of some Northwest Atlantic groundfish stock assessments. (35 pages, revised)
- 90/97\* N1832 BRODIE, W. B. A review of the assessments of the American plaice stock in Div. 3LNO in relation to the recent decline in stock abundance. (16 pages)
- 90/98\* N1833 BRODIE, W. B., S. J. WALSH, and W. R. BOWERING. Managing transboundary flatfish stocks - sources and consequences of uncertainty. (12 pages)
- 90/99\* N1834 HORSTED, Sv. Aa. Biological advice for and management of some of the major fisheries resources in Greenland waters. (25 pages)
- 90/100\* N1835 PELLETIER, D., and A. LAUREC. Toward more efficient adaptive TAC policies with error-prone data. (15 pages)
- 90/101\* N1836 MYERS, R. A. Population variability and the range of a species. (8 pages)
- 90/102\* N1837 LASSEN, H. Biological uncertainties in fish stock management. (6 pages)
- 90/103\* N1838 RESTREPO, V. R., J. W. BAIRD, C. A. BISHOP, and J. M. HOENIG. Quantifying uncertainty in ADAPT (VPA) outputs using simulation - an example based on the assessment of cod in Divisions 2J+3KL. (11 pages)
- 90/104\* N1839 BAIRD, J. W., C. A. BISHOP, and E. F. MURPHY. Sudden changes in the perception of stock size and reference catch levels for cod in Divisions 2J+3KL. (10 pages)
- 90/105\* N1840 FRÉCHET, A. A declining cod stock (3Pn, 4RS), how can we learn from the past? (15 pages)
- 90/106\* N1841 FAHRIG, L., and B. ATKINSON. Concurrent exploitation of multiple stocks: a redfish simulation study. (26 pages)
- 90/107\* N1842 MYERS, R. A. Setting quotas in a stochastic fishery. (10 pages)
- 90/108\* N1843 KIZNER, Z. I. Bootstrap estimation of the confidence intervals of stock and TAC assessments with the use of dynamic surplus production models. (6 pages)
- 90/109\* N1844 KIZNER, Z. I. The error of the biomass estimate as a function of survey parameters and the statistics of a concentration density field. (9 pages)
- 90/110\* N1845 TALLMAN, R. Reduction of uncertainty caused by discarding in the fisheries of the Gulf of St. Lawrence. (20 pages)
- 90/111\* N1846 ROSENBERG, A. A., and S. BRAULT. Stock rebuilding strategies over different time scales. (17 pages)
- 90/112\* N1848 SHELTON, P. A., L. FAHRIG, and R. B. MILLAR. Uncertainty associated with cod-capelin interactions: how much is too much? (13 pages)
- 90/113\* N1849 MOHN, R. Stability and sustainability of harvesting strategies in a modelled fishery. (10 pages)
- 90/114 N1850 PAZ, J., and M. G. LARRAÑETA. Year-class variations of American plaice and yellowtail flounder in Div. 3LNO and the abundance of other commercial fish. (10 pages)
- 90/115\* N1851 SEREBRYAKOV, V. P. Prediction of year-class strength under uncertainties related to survival in early life history of some North Atlantic commercial fish. (13 pages)

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\* Special Session Papers.

SUMMARY DOCUMENTS (SCS)

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| 90/01          | N1703           | <u>NAFO SECRETARIAT.</u> Historical catches of selected species by stock area and country for the period 1978-88. (38 pages) |

SCS Documents (continued)

90/02 N1705 LASSEN, H. Report of the workshop on silver hake database. (14 pages)

90/03 N1714 MEYBOOM, P. Canadian request for scientific advice on management in 1991 of certain stocks in Subareas 0 to 4. (1 page)

90/04 N1715 PAULSEN, J. Denmark (Greenland) request for scientific advice on management of certain stocks in 1991. (2 pages)

90/05 N1722 CHUMAKOV, A. K., V. A. BOROVKOV, and V. A. RIKHTER. USSR research report for 1989. (21 pages)

90/06 N1725 NAFO SECRETARIAT. Provisional index and list of titles of research and summary documents for 1989. (24 pages)

90/07 N1726 COADY, L. W., M. CHADWICK, P. A. KOELLER, and A. FRÉCHET. Canadian research report for 1989. (28 pages)

90/08 N1727 BOYAR, H. C., and F. M. SERCHUK. US research report for 1989. (10 pages)

90/09 N1807 NAFO SECRETARIAT. List of biological sampling data for 1988. (44 pages)

90/10 N1731 NAFO SECRETARIAT. Notes on statistical activities and publications since June 1989. (2 pages)

90/11 N1732 NAFO SECRETARIAT. Tagging activities reported for the Northwest Atlantic in 1989. (6 pages)

90/12 N1768 AVILA DE MELO, A. M., M. L. GODINHO, R. ALPOIM, and M. CARNEIRO. Portuguese research report for 1989. (22 pages)

90/13 N1769 VAZQUEZ, A., and G. P-GANDARAS. Spanish research report for 1989. (13 pages)

90/14 N1770 PEDERSEN, S. A. Denmark/Greenland research report for 1989. (8 pages)

90/15 N1771 UOZUMI, Y. Japanese research report for 1989. (3 pages)

90/16 N1783 ERNST, P., and R. EGGERS. German Democratic Republic research report for 1989. (9 pages)

90/17 N1805 DOMINGUEZ, R., A. PASCHALIDIS, and S. VALLE. Cuban research report for 1989. (8 pages)

90/18 N1808 ASSISTANT EXECUTIVE SECRETARY. Report to the CWP on NAFO Statistical Program, Publications and ADP. (14 pages)

90/19 N1810 CWP SECRETARY. Report of the fourteenth session of the Coordinating Working Party on Atlantic Fishery Statistics (CWP), February 1990. (45 pages)

90/20 N1816 STACREC WORKING GROUP. Final report of the STACREC Working Group on survey design and procedures. (81 pages)

90/21 N1819 NAFO SECRETARIAT. Provisional nominal catches in the Northwest Atlantic, 1989. (44 pages + Addendum 1 page)

90/22 N1820 CORNUS, H. P., and W. B. BRODIE. A compilation of research vessel surveys on a stock by stock basis. (17 pages)

90/23 N1821 NAFO. Report of Scientific Council, June 1990 Meeting. (131 pages)

90/24 N1823 PACIORKOWSKI, A. J. Polish research report, 1989. (9 pages)

90/25 N1860 NAFO. Report of Scientific Council, Annual Meeting, September 1990. (32 pages)

## SUBJECT INDEX

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 61 (capelin biomass by acoustics Div 3N; USSR fishery)  
 87 (status of the redfish resource in Div 3LN)  
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 73 (assessment of the cod stock in NAFO Div. 3NO)  
 75 (roundnose grenadier in SA 0+1 and 2+3)  
 80 (an assessment of A plaice stock in Div 3LNO)  
 96 (consistency of some NW Atlantic groundfish assess.)  
 103 (quantifying uncertainty in ADAPT, eg cod Div 2J+3KL)  
 104 (perception of stock size and catch, cod Div 2J+3KL)

Age, composition

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 6 (roundnose grenadier catch comp NW Atlantic 1971-89)  
 7 (USSR capelin acoustic survey 1988/89 in Div 3LNO)  
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 99 (advice, management of major fisheries of Greenland)  
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 49 (S hake assessment in Div 4VWX without age data use)  
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 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 48 (use of adaptive framework for stock assessment)  
 49 (S hake assessment in Div 4VWX without age data use)  
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 108 (bootstrap est., TAC assess; surplus prod models)  
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SCR 90/ 3 (Canadian request for scientific advice for 1991)  
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Atlantic Ocean, Northeast (see also under names of specific areas as only the more general references are listed here)

SCR 90/ 95 (on the quality of North Sea cod stock forecasts)  
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 15 (stock-recruitment in some fish in NW Atlantic)  
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 77 (ocean temperature/atmosph processes at Fyllas Bank)  
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 105 (a declining cod stock 3Pn+4RS, learn from the past?)  
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 111 (stock rebuild strategies over different timescales)  
 112 (uncertainty with cod-capelin interaction: how much)  
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 60 (inshore capelin fishery in Div 3L in 1989)  
 64 (preliminary assessment of shrimp at Denmark Strait)  
 65 (data and preliminary assessment of shrimp in SA0+1)  
 89 (France SP and M cod fishery in Div 3Pn, 4RS 1978-89)

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- SCR 90/ 96 (consistency of some NW Atlantic groundfish assess.)  
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- SCR 90/ 7 (USSR capelin acoustic survey 1988/89 in Div 3LNO)  
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 61 (capelin biomass by acoustics Div 3N; USSR fishery)  
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- Cod, Arctic (*Boreogadus saida*) (see also Cod, Atlantic)
- SCR 90/115 (prediction of year-class strength under uncertainty)
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- SCR 90/ 5 (cod assessment, Div 3KLNO 1989 trawl-acoustic data)  
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 90 {catch-rate index for Greenland shrimp fishery SA 1}  
 92 {distribution and abundance Flemish Cap cod 1988-89}  
 98 {managing transboundary flatfish stocks-uncertainty}  
 99 {advice, management of major fisheries of Greenland}  
 101 {population variability and the range of a species}  
 106 {exploitation of multiple stocks: redfish simulation}  
 109 {biomass estimate error; surveys and fish density}

Diurnal effects/patterns

- SCR 90/ 33 {cod stomach sampling in W Greenland waters 1989}  
 58 {stratified-random trawl survey, shrimp in ICES XIV}

## [E]

EEC (see European Economic Community)East Greenland area (see Greenland, East)Echo-sounding (see Acoustics)Ecology (see also Environment)

- SCR 90/ 14 {S hake ecology distribution, USSR-Canada program}

Eddies

- SCR 90/ 16 {time-series sampled on annual intervals}  
 24 {variation in shelf water front off USA, 1989}  
 25 {warm-core Gulf Stream rings off NE USA, 1989}  
 83 {overview of NAFO environmental conditions, 1989}  
 84 {MEDS environmental report for 1989}

Effort (see catch)Eggs; Ova

- SCR 90/ 35 {combined assessment G halibut SA 0-2 and Div 3KL}  
 41 {fecundity variation in A plaice from 1987 to 1989}  
 63 {fecundity of shrimp sampled at NW and W Greenland}  
 115 {prediction of year-class strength under uncertainty}

Environment (see also specific subject headings)

- SCR 90/ 78 {greenhouse effects in N Atlantic on fisheries}  
 83 {overview of NAFO environmental conditions, 1989}  
 84 {MEDS environmental report for 1989}

Environment Subcommittee (NAFO)

- SCR 90/ 23 {report of Scientific Council, June 1990}

Euphausiids (see under plankton and specific names)European Economic Community (EEC)

## [F]

Fecundity

- SCR 90/ 41 {fecundity variation in A plaice from 1987 to 1989}  
 63 {fecundity of shrimp sampled at NW and W Greenland}  
 115 {prediction of year-class strength under uncertainty}

Federal Republic of Germany (FRG)Feeding, Food

- SCR 90/ 14 {S hake ecology distribution, USSR-Canada program}  
 33 {cod stomach sampling in W Greenland waters 1989}  
 39 {stratified random bottom trawl survey in SA 1 1989}

Fishing effort (see catch)Fishing gear (see also names of gears)

- SCR 90/ 51 {assessment of G halibut stock SA 2, Div 3K and 3L}  
 52 {G halibut stock and feasible yield, SA 0+1 Div 2GH}  
 55 {data and preliminary assessment of SA 1 cod}  
 56 {selection in shrimp trawl}  
 60 {inshore capelin fishery in Div 3L in 1989}  
 110 {uncertainty caused by discarding Div 4ST fisheries}  
 113 {stability of harvest strategy in modelled fishery}

Flatfish (see specific names)Flemish Cap (Div. 3M; also see Grand Bank)

- SCR 90/ 8 {stock status and TAC for redfish in Div 3M, 1991}  
 22 {some comments, exploitation Flemish Cap cod stock}  
 40 {changes in cohort growth rate of Flemish Cap cod}  
 43 {Faroese longline cod fishery Flemish Cap 1973-88}  
 47 {Northern prawn stock in Flemish Cap}  
 53 {assessment, age-length, maturity, Flemish Cape cod}  
 68 {bottom trawl survey results, Flemish Cap 1989}  
 69 {results of A plaice otolith exchange, Canada-Spain}  
 81 {an assessment of A plaice stock on the Flemish Cap}  
 92 {distribution and abundance Flemish Cap cod 1988-89}

Flounder, witch (*Glyptocephalus cynoglossus*)

- SCR 90/ 19 {S hake, other fish and squid in Div 4VWX in 1989}  
 54 {witch flounder in Div 3NO}  
 57 {abund, biomass, witch flo. Div 3NO G halibut 3KL}

Flounder, yellowtail (*Limanda ferruginea*)

- SCR 90/ 15 {stock-recruitment in some fish in NW Atlantic}  
 19 {S hake, other fish and squid in Div 4VWX in 1989}  
 70 {biomass abundance, yellowtail flounder in Div 3LNO}  
 85 {yellowtail flounder distribution on the Grand Bank}  
 86 {assessment of yellowtail flounder in Div 3LNO}  
 98 {managing transboundary flatfish stocks-uncertainty}  
 114 {year-class variations of flounder in Div 3LNO}

Flounders (general)Food (see Feeding)France

- SCR 90/ 89 {France SP and M cod fishery in Div 3Pn,4RS 1978-89}

Fylla Bank (see also Greenland, West)

- SCR 90/ 16 {time-series sampled on annual intervals}  
 33 {cod stomach sampling in W Greenland waters 1989}  
 77 {ocean temperature/atmosph processes at Fylla Bank}

## [G]

Gadidae (see under specific common names)Gadus morhua (see Cod, Atlantic)GeneticsGeorges Bank (Div. 52) (see also New England area)

- SCR 90/ 13 {surface/bottom temp series NE Fish Center 1963-89}  
 24 {variation in shelf water front off USA, 1989}  
 25 {warm-core Gulf Stream rings off NE USA, 1989}  
 111 {stock rebuild strategies over different timescales}

- SCR 90/ 8 {United States research report for 1989}

German Democratic Republic (GDR)

- SCR 90/ 16 {GDR research report for 1989}

Gillnet (see also Fishing Gear)

- SCR 90/ 30 {young cod inshore distribution, W Greenland 1989}  
 51 {assessment of G halibut stock SA 2, Div 3K and 3L}  
 110 {uncertainty caused by discarding Div 4ST fisheries}

Glyptocephalus cynoglossus (see Flounder, witch)

## SUBJECT INDEX

Golden redfish (see Redfishes, Atlantic)Grand Bank (Div. 3LNO including inshore)

SCR 90/ 5 (cod assessment, Div 3KLNO 1989 trawl-acoustic data)  
 7 (USSR capelin acoustic survey 1988/89 in Div 3LNO)  
 9 (stock status and TAC for redfish in Div 3LN, 1991)  
 23 (cod in Div 2J+3KL, stock portion beyond 200-miles)  
 41 (fecundity variation in A plaice from 1987 to 1989)  
 51 (assessment of G halibut stock SA 2, Div 3K and 3L)  
 54 (witch flounder in Div 3NO)  
 57 (abund, biomass, witch flo. Div 3NO G halibut 3KL)  
 59 (capelin school surface area index, Div 3L, 1989)  
 60 (inshore capelin fishery in Div 3L, in 1989)  
 61 (capelin biomass by acoustics Div 3N; USSR fishery)  
 69 (results of A plaice otolith exchange, Canada-Spain)  
 70 (biomass abundance, yellowtail flounder in Div 3LNO)  
 71 (biomass and abundance estimates, A plaice Div 3KLMO)  
 72 (cod biomass and age in Div 3NO relative to 200-mile)  
 73 (assessment of the cod stock in NAFO Div. 3NO)  
 76 (juvenile and adult distribution, A plaice Div 3LNO)  
 80 (an assessment of A plaice stock in Div 3LNO)  
 85 (yellowtail flounder distribution on the Grand Bank)  
 86 (assessment of yellowtail flounder in Div 3LNO)  
 87 (status of the redfish resource in Div 3LN)  
 97 (review of assessments of A plaice in Div 3LNO)  
 98 (managing transboundary flatfish stocks-uncertainty)  
 103 (quantifying uncertainty in ADAPT, eg cod Div 2J+3KL)  
 104 (perception of stock size and catch, cod Div 2J+3KL)  
 112 (uncertainty with cod-capelin interaction: how much)  
 114 (year-class variations of flounder in Div 3LNO)

Greenland (Denmark)

SCR 90/ 44 (Greenland shrimp fishery at NW Greenland 1985-89)  
 90 (catch-rate index for Greenland shrimp fishery SA 1)  
 99 (advice, management of major fisheries of Greenland)

SCS 90/ 14 (Denmark/Greenland research report for 1989)

Greenland, East (Denmark Strait)

SCR 90/ 11 (Norwegian shrimp study in E Greenland waters 1989)  
 12 (Sept 1989 cruise report, M/T Håksøy-II, E Greenland)  
 17 (variation of salt and heat flow in West Greenland)  
 32 (larval drift on recruitment of W Greenland cod)  
 34 (E and W Greenland cod migration study by otolith)  
 36 (infestation of parasites in NW Atlantic G halibut)  
 42 (shrimp fishery in Denmark Strait 1989, early 1990)  
 58 (stratified-random trawl survey, shrimp in ICES XIV)  
 62 (trial fishery for shrimp off SW, SE and E Greenland)  
 64 (preliminary assessment of shrimp at Denmark Strait)  
 74 (status of SA 1 cod and the fisheries; ICES Report)  
 77 (ocean temperature/atmosph processes at Fyllas Bank)  
 82 (review of Denmark Strait shrimp fishery in 1978-89)  
 91 (sustainable yield, Denmark Strait shrimp 1980-89)  
 99 (advice, management of major fisheries of Greenland)

Greenland, West (Subarea 1)

SCR 90/ 16 (time-series sampled on annual intervals)  
 17 (variation of salt and heat flow in West Greenland)  
 28 (logbook catch rate index, W Greenland Cod 1975-89)  
 29 (swept area abundance of inshore cod, W Greenland)  
 30 (young cod inshore distribution, W Greenland 1989)  
 31 (effect of emigration on VPA-assessments, SA1 cod)  
 32 (larval drift on recruitment of W Greenland cod)  
 33 (cod stomach sampling in W Greenland waters 1989)  
 34 (E and W Greenland cod migration study by otolith)  
 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 36 (infestation of parasites in NW Atlantic G halibut)  
 37 (G halibut tagging experiment in W Greenland fjords)  
 38 (longline fishery for G halibut Davis Strait, 1989)  
 39 (stratified random bottom trawl survey in SA 1 1989)  
 44 (Greenland shrimp fishery at NW Greenland 1985-89)  
 46 (stratified-random trawl survey, SA 0+1 shrimp 1989)  
 52 (G halibut stock and feasible yield, SA 0+1 Div 2GH)  
 55 (data and preliminary assessment of SA 1 cod)  
 56 (selection in shrimp trawl)  
 63 (fecundity of shrimp sampled at NW and W Greenland)  
 65 (data and preliminary assessment of shrimp in SA0+1)  
 74 (status of SA 1 cod and the fisheries; ICES Report)  
 75 (roundnose grenadier in SA 0+1 and 2+3)  
 77 (ocean temperature/atmosph processes at Fyllas Bank)  
 78 (greenhouse effects in N Atlantic on fisheries)  
 88 (survey biomass and abundance for redfish SA1 1989)  
 90 (catch-rate index for Greenland shrimp fishery SA 1)  
 99 (advice, management of major fisheries of Greenland)

Greenland halibut (see Halibut, Greenland)Grenadier, roughhead (*Macrourus berglax*)Grenadier, roundnose (*Coryphaenoides rupestris*)

SCR 90/ 6 (roundnose grenadier catch comp NW Atlantic 1971-89)  
 39 (stratified random bottom trawl survey in SA 1 1989)

SCR 90/ 75 (roundnose grenadier in SA 0+1 and 2+3)

Groundfish (see also common names)

SCR 90/ 13 (surface/bottom temp series NE Fish Center 1963-89)  
 39 (stratified random bottom trawl survey in SA 1 1989)  
 45 (new strata for groundfish surveys in Div 4RST)  
 57 (abund, biomass, witch flo. Div 3NO G halibut 3KL)  
 71 (biomass and abundance estimates, A plaice Div 3KLMO)  
 96 (consistency of some NW Atlantic groundfish assess.)  
 111 (stock rebuild strategies over different timescales)  
 113 (stability of harvest strategy in modelled fishery)

Growth

SCR 90/ 1 (distrib., abundance 0-group S hake Div 4VWX 1988)  
 2 (young S hake growth in Scotian area 1977-88)  
 3 (aging S hake by otolith chemical composition)  
 4 (inconsistencies in growth studies Div 4VWX S hake)  
 34 (E and W Greenland cod migration study by otolith)  
 40 (changes in cohort growth rate of Flemish Cap cod)  
 49 (S hake assessment in Div 4VWX without age data use)  
 53 (assessment, age-length, maturity, Flemish Cape cod)  
 94 (effect of growth on  $F_{0.1}$  estimation Chesapeake Bay)  
 107 (setting quotas in a stochastic fishery)  
 112 (uncertainty with cod-capelin interaction: how much)

Gulf of Maine (Div. 5Y)

SCR 90/ 13 (surface/bottom temp series NE Fish Center 1963-89)  
 26 (temperatures and salinities off USA, 1988)  
 27 (temperatures and salinities off USA, 1989)  
 66 (continuous plankton records 1989 off eastern USA)

Gulf of St. Lawrence (Div. 4RSTV)

SCR 90/ 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 45 (new strata for groundfish surveys in Div 4RST)  
 89 (France SP and M cod fishery in Div 3PN, 4RS 1978-89)  
 105 (a declining cod stock 3PN+4RS, learn from the past?)  
 106 (exploitation of multiple stocks: redfish simulation)

Gulf Stream (see also hydrography and oceanography)

SCR 90/ 24 (variation in shelf water front off USA, 1989)  
 25 (warm-core Gulf Stream rings off NE USA, 1989)  
 26 (temperatures and salinities off USA, 1988)  
 27 (temperatures and salinities off USA, 1989)  
 66 (continuous plankton records 1989 off eastern USA)

(H)

Haddock (*Melanogrammus aeglefinus*)

SCR 90/ 19 (S hake, other fish and squid in Div 4VWX in 1989)  
 21 (Scotian Shelf S hake: 1989 commercial fishery)  
 96 (consistency of some NW Atlantic groundfish assess.)  
 101 (population variability and the range of a species)  
 111 (stock rebuild strategies over different timescales)

Hake, red (*Urophycis chuss*)

SCR 90/ 19 (S hake, other fish and squid in Div 4VWX in 1989)

Hake, silver (*Merluccius bilinearis*)

SCR 90/ 1 (distrib., abundance 0-group S hake Div 4VWX 1988)  
 2 (young S hake growth in Scotian area 1977-88)  
 3 (aging S hake by otolith chemical composition)  
 4 (inconsistencies in growth studies Div 4VWX S hake)  
 14 (S hake ecology distribution, USSR-Canada program)  
 15 (stock-recruitment in some fish in NW Atlantic)  
 18 (S hake stock size and densities Div 4VWX 1979-88)  
 19 (S hake, other fish and squid in Div 4VWX in 1989)  
 20 (status of Scotian Shelf S hake populations in 1989)  
 21 (Scotian Shelf S hake: 1989 commercial fishery)  
 48 (use of adaptive framework for stock assessment)  
 49 (S hake assessment in Div 4VWX without age data use)  
 50 (multiplicative model for effort standardization)

SCS 90/ 2 (report of the workshop on silver hake database)

Hake, white (*Urophycis tenuis*)

SCR 90/ 19 (S hake, other fish and squid in Div 4VWX in 1989)

Halibut, Atlantic (*Hippoglossus hippoglossus*)

SCR 90/ 39 (stratified random bottom trawl survey in SA 1 1989)

Halibut, Greenland (*Reinhardtius hippoglossoides*)

SCR 90/ 6 (roundnose grenadier catch comp NW Atlantic 1971-89)  
 19 (S hake, other fish and squid in Div 4VWX in 1989)  
 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 36 (infestation of parasites in NW Atlantic G halibut)

## SUBJECT INDEX

- SCR 90/ 37 (G halibut tagging experiment in W Greenland fjords)  
 38 (longline fishery for G halibut Davis Strait, 1989)  
 39 (stratified random bottom trawl survey in SA 1 1989)  
 51 (assessment of G halibut stock SA 2, Div 3K and 3L)  
 52 (G halibut stock and feasible yield, SA 0+1 Div 2GH)  
 57 (abund, biomass, witch flo. Div 3NO G halibut 3KL)  
 68 (bottom trawl survey results, Flemish Cap 1989)  
 115 (prediction of year-class strength under uncertainty)

Herring, Atlantic (*Clupea harengus*)

- SCR 90/ 19 (S hake, other fish and squid in Div 4VWX in 1989)  
 101 (population variability and the range of a species)  
 115 (prediction of year-class strength under uncertainty)

Hippoglossus hippoglossus (see Halibut, Atlantic)Homarus americanus (see Lobster, American)Hydroacoustics (see Acoustics)Hydrography (see also specific headings)

- SCR 90/ 10 (oceanographic overview of the NW Atlantic in 1989)  
 13 (surface/bottom temp series NE Fish Center 1963-89)  
 14 (S hake ecology distribution, USSR-Canada program)  
 79 (coordination of hydrographic activities, N Atlantic)

[I]

Ice; Icebergs

- SCR 90/ 10 (oceanographic overview of the NW Atlantic in 1989)  
 12 (Sept 1989 cruise report, M/T Håkey-II, E Greenland)  
 16 (time-series sampled on annual intervals)  
 83 (overview of NAFO environmental conditions, 1989)  
 90 (catch-rate index for Greenland shrimp fishery SA 1)

Iceland area (see also Greenland, East)

- SCR 90/ 32 (larval drift on recruitment of W Greenland cod)  
 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 37 (G halibut tagging experiment in W Greenland fjords)  
 74 (status of SA 1 cod and the fisheries; ICES Report)

Ichthyoplankton (see Plankton)Illex illecebrosus (see Squid, short-finned)Inshore (also see respective areas)

- SCR 90/ 29 (swept area abundance of inshore cod, W Greenland)  
 30 (young cod inshore distribution, W Greenland 1989)  
 55 (data and preliminary assessment of SA 1 cod)  
 59 (capelin school surface area index, Div 3L, 1989)  
 60 (inshore capelin fishery in Div 3L in 1989)  
 62 (trial fishery for shrimp off SW, SE and E Greenland)  
 67 (frontal oscillations on the NE Newfoundland shelf)  
 74 (status of SA 1 cod and the fisheries; ICES Report)  
 83 (overview of NAFO environmental conditions, 1989)  
 99 (advice, management of major fisheries of Greenland)  
 105 (a declining cod stock 3Pn+4RS, learn from the past?)

Irminger Sea (see also currents)

- SCR 90/ 17 (variation of salt and heat flow in West Greenland)  
 32 (larval drift on recruitment of W Greenland cod)  
 34 (E and W Greenland cod migration study by otolith)

[J]

Japan

- SCR 90/ 39 (stratified random bottom trawl survey in SA 1 1989)  
 SCS 90/ 15 (Japanese research report for 1989)

[L]

Labrador area (Subarea 2)

- SCR 90/ 6 (roundnose grenadier catch comp NW Atlantic 1971-89)  
 23 (cod in Div 2J+3KL, stock portion beyond 200-miles)  
 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 51 (assessment of G halibut stock SA 2, Div 3K and 3L)  
 52 (G halibut stock and feasible yield, SA 0+1 Div 2GH)  
 67 (frontal oscillations on the NE Newfoundland shelf)  
 75 (roundnose grenadier in SA 0+1 and 2+3)  
 103 (quantifying uncertainty in ADAPT, eg cod Div 2J+3KL)  
 104 (perception of stock size and catch, cod Div 2J+3KL)  
 112 (uncertainty with cod-capelin interaction: how much)

Larvae

- SCR 90/ 2 (young S hake growth in Scotian area 1977-88)  
 7 (USSR capelin acoustic survey 1988/89 in Div 3LNO)  
 32 (larval drift on recruitment of W Greenland cod)  
 35 (combined assessment G halibut SA 0-2 and Div 3KL)

Length; length composition

- SCR 90/ 1 (distrib., abundance 0-group S hake Div 4VWX 1988)  
 2 (young S hake growth in Scotian area 1977-88)  
 3 (aging S hake by otolith chemical composition)  
 5 (cod assessment, Div 3LNO 1989 trawl-acoustic data)  
 6 (roundnose grenadier catch comp NW Atlantic 1971-89)  
 7 (USSR capelin acoustic survey 1988/89 in Div 3LNO)  
 8 (stock status and TAC for redfish in Div 3M, 1991)  
 9 (stock status and TAC for redfish in Div 3LN, 1991)  
 11 (Norwegian shrimp study in E Greenland waters 1989)  
 12 (Sept 1989 cruise report, M/T Håkey-II, E Greenland)  
 20 (status of Scotian Shelf S hake populations in 1989)  
 21 (Scotian Shelf S hake: 1989 commercial fishery)  
 29 (swept area abundance of inshore cod, W Greenland)  
 30 (young cod inshore distribution, W Greenland 1989)  
 33 (cod stomach sampling in W Greenland waters 1989)  
 34 (E and W Greenland cod migration study by otolith)  
 38 (longline fishery for G halibut Davis Strait, 1989)  
 39 (stratified random bottom trawl survey in SA 1 1989)  
 40 (changes in cohort growth rate of Flemish Cap cod)  
 44 (Greenland shrimp fishery at NW Greenland 1985-89)  
 47 (Northern prawn stock in Flemish Cap)  
 49 (S hake assessment in Div 4VWX without age data use)  
 53 (assessment, age-length, maturity, Flemish Cape cod)  
 61 (capelin biomass by acoustics Div 3N; USSR fishery)  
 62 (trial fishery for shrimp off SW, SE and E Greenland)  
 63 (fecundity of shrimp sampled at NW and W Greenland)  
 65 (data and preliminary assessment of shrimp in SA0+1)  
 68 (bottom trawl survey results, Flemish Cap 1989)  
 69 (results of A plaice otolith exchange, Canada-Spain)  
 75 (roundnose grenadier in SA 0+1 and 2+3)  
 81 (an assessment of A plaice stock on the Flemish Cap)  
 85 (yellowtail flounder distribution on the Grand Bank)  
 87 (status of the redfish resource in Div 3LN)  
 89 (France SP and M cod fishery in Div 3Pn,4RS 1978-89)  
 92 (distribution and abundance Flemish Cap cod 1988-89)  
 94 (effect of growth on  $F_{0.1}$  estimation Chesapeake Bay)  
 110 (uncertainty caused by discarding Div 4ST fisheries)  
 112 (uncertainty with cod-capelin interaction: how much)

Limanda ferruginea (see Flounder, yellowtail)Lobster, American (*Homarus americanus*)Loligo pealei (see Squid, long-finned)Long-finned squid (see Squid, long-finned)Longline

- SCR 90/ 29 (swept area abundance of inshore cod, W Greenland)  
 37 (G halibut tagging experiment in W Greenland fjords)  
 38 (longline fishery for G halibut Davis Strait, 1989)  
 43 (Faroeese longline cod fishery Flemish Cap 1973-88)  
 55 (data and preliminary assessment of SA 1 cod)  
 110 (uncertainty caused by discarding Div 4ST fisheries)

[M]

MEDS (Marine Environmental Data Service)

- SCR 90/ 84 (MEDS environmental report for 1989)

Mackerel, Atlantic (*Scomber scombrus*)

- SCR 90/ 15 (stock-recruitment in some fish in NW Atlantic)  
 19 (S hake, other fish and squid in Div 4VWX in 1989)  
 114 (year-class variations of flounder in Div 3LNO)

Macrouridae (see Grenadier)Malloetus villosus (see Capelin)Management

- SCR 90/ 93 (risk analysis in fishery management)  
 94 (effect of growth on  $F_{0.1}$  estimation Chesapeake Bay)  
 95 (on the quality of North Sea cod stock forecasts)  
 96 (consistency of some NW Atlantic groundfish assess.)  
 98 (managing transboundary flatfish stocks-uncertainty)  
 99 (advice, management of major fisheries of Greenland)  
 100 (toward more efficient TAC policies/error-prone data)  
 102 (biological uncertainties in fish stock management)  
 104 (perception of stock size and catch, cod Div 2J+3KL)  
 106 (exploitation of multiple stocks: redfish simulation)

## SUBJECT INDEX

- SCR 90/107 (setting quotas in a stochastic fishery)  
 110 (uncertainty caused by discarding Div 4ST fisheries)  
 111 (stock rebuild strategies over different timescales)  
 113 (stability of harvest strategy in modelled fishery)
- SCS 90/ 3 (Canadian request for scientific advice for 1991)  
 4 (Denmark-Greenland request for advice for 1991)  
 25 (report of Scientific Council, Sep 1990)
- Marine Environmental Data Service (see MEDS)
- Maturation; Maturity
- SCR 90/ 2 (young S hake growth in Scotian area 1977-88)  
 39 (stratified random bottom trawl survey in SA 1 1989)  
 53 (assessment, age-length, maturity, Flemish Cape cod)  
 61 (capelin biomass by acoustics Div 3N; USSR fishery)  
 115 (prediction of year-class strength under uncertainty)
- Melanogrammus aeglefinus (see Haddock)
- Meristics
- SCR 90/ 35 (combined assessment G halibut SA 0-2 and Div 3KL)
- Merluccius bilinearis (see Hake, silver)
- Meteorology
- SCR 90/ 26 (temperatures and salinities off USA, 1988)  
 27 (temperatures and salinities off USA, 1989)  
 79 (coordination of hydrographic activities, N Atlantic)  
 83 (overview of NAFO environmental conditions, 1989)
- Migration (see also Tagging)
- SCR 90/ 2 (young S hake growth in Scotian area 1977-88)  
 6 (roundnose grenadier catch comp NW Atlantic 1971-89)  
 22 (some comments, exploitation Flemish Cap cod stock)  
 31 (effect of emigration on VPA-assessments, SA1 cod)  
 32 (larval drift on recruitment of W Greenland cod)  
 34 (E and W Greenland cod migration study by otolith)  
 35 (combined assessment G halibut SA 0-2 and Div 3KL)  
 37 (G halibut tagging experiment in W Greenland fjords)  
 74 (status of SA 1 cod and the fisheries; ICES Report)  
 89 (France SP and M cod fishery in Div 3Pn, 4RS 1978-89)  
 106 (exploitation of multiple stocks: redfish simulation)
- Mollusca (general) (see also under common names)
- Mortality
- SCR 90/ 8 (stock status and TAC for redfish in Div 3M, 1991)  
 9 (stock status and TAC for redfish in Div 3LN, 1991)  
 49 (S hake assessment in Div 4VWX without age data use)  
 52 (G halibut stock and feasible yield, SA 0+1 Div 2GH)  
 75 (roundnose grenadier in SA 0+1 and 2+3)  
 93 (risk analysis in fishery management)  
 94 (effect of growth on  $F_{0.1}$  estimation Chesapeake Bay)  
 95 (on the quality of North Sea cod stock forecast)  
 96 (consistency of some NW Atlantic groundfish assess.)  
 97 (review of assessments of A plaice in Div 3LNO)  
 99 (advice, management of major fisheries of Greenland)  
 100 (toward more efficient TAC policies/error-prone data)  
 103 (quantifying uncertainty in ADAPT, eg cod Div 2J+3KL)  
 105 (a declining cod stock 3Pn+4RS, learn from the past?)  
 106 (exploitation of multiple stocks: redfish simulation)  
 111 (stock rebuild strategies over different timescales)  
 113 (stability of harvest strategy in modelled fishery)  
 115 (prediction of year-class strength under uncertainty)
- Multiplicative model
- SCR 90/ 20 (status of Scotian Shelf S hake populations in 1989)  
 28 (logbook catch rate index, W Greenland Cod 1975-89)  
 48 (use of adaptive framework for stock assessment)  
 50 (multiplicative model for effort standardization)  
 55 (data and preliminary assessment of SA 1 cod)  
 74 (status of SA 1 cod and the fisheries; ICES Report)  
 75 (roundnose grenadier in SA 0+1 and 2+3)  
 86 (assessment of yellowtail flounder in Div 3LNO)  
 87 (status of the redfish resource in Div 3LN)  
 90 (catch-rate index for Greenland shrimp fishery SA 1)  
 104 (perception of stock size and catch, cod Div 2J+3KL)
- [N]
- Nematodes
- SCR 90/ 22 (some comments, exploitation Flemish Cap cod stock)  
 36 (infestation of parasites in NW Atlantic G halibut)
- New England area (Subareas 5 and 6) (pertains generally to southern New England; see Georges Bank and Gulf of Maine for other parts of the area)
- SCR 90/ 13 (surface/bottom temp series NE Fish Center 1963-89)  
 24 (variation in shelf water front off USA, 1989)
- SCR 90/ 25 (warm-core Gulf Stream rings off NE USA, 1989)  
 26 (temperatures and salinities off USA, 1988)  
 27 (temperatures and salinities off USA, 1989)  
 66 (continuous plankton records 1989 off eastern USA)  
 67 (frontal oscillations on the NE Newfoundland shelf)  
 83 (overview of NAFO environmental conditions, 1989)  
 84 (MEDS environmental report for 1989)  
 94 (effect of growth on  $F_{0.1}$  estimation Chesapeake Bay)  
 101 (population variability and the range of a species)
- SCS 90/ 8 (United States research report for 1989)
- Newfoundland area (Subarea 3, includes inshore)
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STACPUB (Standing Committee on Publications)

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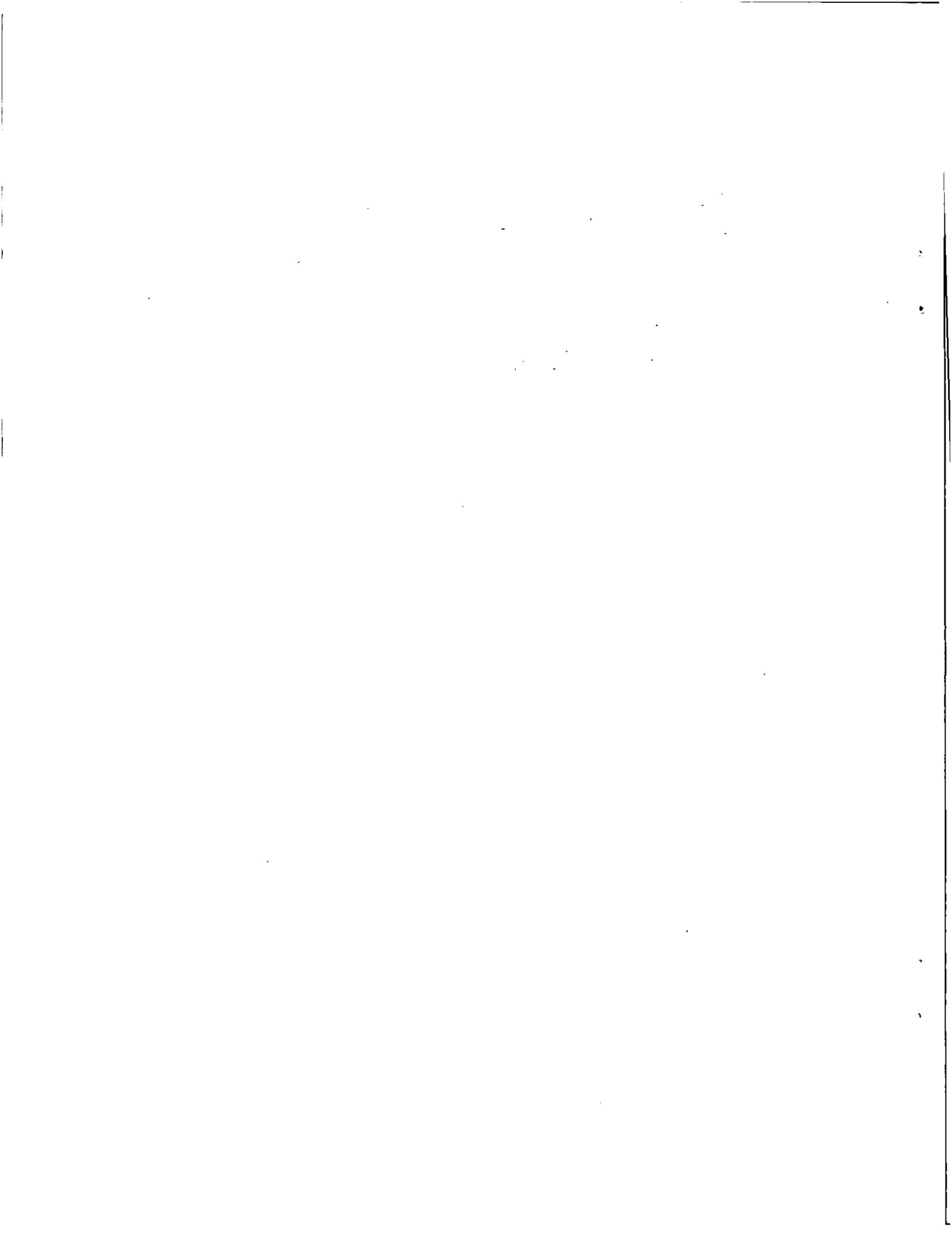
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