INSTRUMENTATION

This unit has three functions, maintenance of the electronic and mechanical instruments now in use at the Laboratory, informing biologists about progress made in instrumentation in other laboratories and fields of research which may be adapted to solving their problems, and aiding biologists in the design and development of new tools.

This Laboratory now has an underwater television chain, and underwater still camera, self-contained underwater breathing apparatus, ship-to-shore radio equipment, bathythermographs, a recording temperature-depth telemeter, and several types of automatic or semi-automatic plankton and bottom samplers. All of these instruments require maintenance and repair; some need periodic calibration and occasional modification. In the past, these duties have been carried out by the biologists who used the instruments but with the increasing complexity of the gear this is no longer practical.

Progress in instrumentation is extremely rapid in all fields of research. Many tools developed elsewhere can be adapted to solving the problems of fishery biology. This unit is responsible for keeping in touch with new developments in instrumentation and informing biologists of new tools as they become available.

Traditionally, new instruments have been developed by the particular biologist who had a particular problem to solve. This system will probably continue but this unit will aid in the selection of the best materials and the most appropriate mechanism as well as in the fabrication of the prototype.

At present there is no need for a full scale, complete instrumentation unit. The ideal arrangement would include an electronic shop, a small machine shop, an electronic technician, and a machinist.

August 6, 1959

SUMMARY CONT L SCHEDULE

Investigation: **Instrumentation**
Biological Laboratory: **Woods Hole, Mass.**

Project Title	Est.* Cost	Fiscal Years 57	58	59	60	61	62	63	64	65	66
Instrumentation	**157.8**	**11.7**	**13.0**	**12.6**	**6.5**	**15.0**	**17.8**	**19.1**	**19.4**	**21.2**	**21.5**
Investigation Total	**157.8**	**11.7**	**13.0**	**12.6**	**6.5**	**15.0**	**17.8**	**19.1**	**19.4**	**21.2**	**21.5**

Annual Review		
Laboratory	Regional or Area Office	Washington Office

Prepared by: **James R. Crossen** Date 8/6/59
Recommended by: Date
Lab. Director **Herbert W. Graham**
Reg. or Area Dir.
Branch Chief
Approved by:
Division Chief for Director

*Total needed by Laboratory for Project in thousands of dollars.

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U. S. Fish and Wildlife Service
Bureau of Commercial Fisheries

Sheet No. 1

Location: Woods Hole, Mass.
Date: August 6, 1959
File No.

Research Project Outline

Title of Project: Instrumentation

Investigation Title:

Investigation Chief:

Project Leader: James M. Crossen Elec. Equip. Spec. GS-9
Name Title Grade

Assistants: (Title and Grade)

Collaborators:

Need for Information: Service Unit

Objective:

Method of Procedure:

Phase 1:

Phase 2:

Sheet No. 2 File No.:

Method of Procedure: (Cont'd)

Phase 3:

Estimated Costs: Total Needed by Laboratory for Complete Project 157.8

	FY 1959	FY 1960	FY 1961
Personal Services	6.1	6.3	12.5
Other Expenses: Within Project			
Lab. Adm. & Ser.	6.5	0.2	2.5
Lab. Total	12.6	6.5	15.0
Regional Office			
Washington Office			
Total			

Recommended Source of Funds _____
(S-K, Regular, Contributed, etc.)

Estimated Date of Completion: Phase 1 FY ___; Phase 2 FY ___; Phase 3 FY ___; Project FY ___

Recommended by: Date

Originator _____

Investigation Chief James M. Crossen

Laboratory Director Herbert W. Graham

Regional Director _____

Branch Chief _____

Approved by:

Division Chief for Director _____

Remarks

(Continue on reverse side)

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