



CONTRACT

**FOR THE SUPPLY OF TWO
TORPEDO SUBMARINES
TO THE POLISH NAVY**



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for the supply of two
Torpedo-Submarines
of 1100 tons to the
Polish Navy.



The Agreement Proper.

At 's-Gravenhage on the 29th day of January 1936 between Rear Admiral J. SWIRSKY, Chief of the Polish Navy, acting in the name and on behalf of the Government of the Republic of Poland of the one part (hereinafter called the „Polish Navy“) and de KONINKLIJKE MAATSCHAPPIJ „DE SCHELDE“ whose registered office is at Vlissingen, represented with full powers dated January 11th 1936 (legalized at the Polish Consulate in Amsterdam, the January 13th, 1936, No. 202) by Mr. H. C. WESSELING and designated hereinafter „the Constructor“ of the other part, the following Agreement has been entered into :

Part I.

Art. 1.

EXTENT OF THE SUPPLY. — The Constructor undertakes to construct and to supply afloat at the ports of Vlissingen/Rotterdam to the conditions and in the time hereinafter specified, two torpedo submarines of 1100 tons at the lump price of

for the total supply.

The vessels and equipment shall be in accordance with the specifications and drawings attached to this Agreement forming second part of it and constituting an integral part of the present Agreement.

The above mentioned price includes the expenses entailed in the supply of the vessels, costs of design and drawings, costs of tests of material and shop tests of all apparatus supplied by the Constructor, costs of trials of the vessels, costs of insurance, etc.

For the purpose of this Agreement each vessel shall, save where the context otherwise requires, be treated as a separate unit: so that any numbers, dimensions, and various data stipulated in this Agreement and Specifications shall apply to one vessel, unless otherwise specified.

THE SUPPLY INCLUDES: The submarine completely ready for service, fitted out with all spare parts and equipment in accordance with the regulations laid down for the Netherlands Navy, and in accordance with the lists of equipment hereinafter mentioned. The material to be supplied is to be all that is necessary for each vessel to be ready for service, except where specified to be supplied by the Polish Navy, and comprises:

1. the hull, fitted out with its all fixed and movable accessories, the electric lighting, the furniture, the ship's boats, and the various installations;
2. the propelling plant, i. e. the Diesel engines with all their accessories, equipment, tools, spares, pipings, tanks, complete lines of shafting, "Vulcan" couplings, screws, main electric motors with all their accessories, control and measuring gear and spare and reserve material;
3. the complete electric wiring, the fittings, the switchboards, the equipment, the control and measuring equipment and the spare parts and accessories;
4. the accumulators with accessories and the control and measuring equipment;
5. the fixed and revolving torpedo-tubes with their accessories, tools and spares; the torpedo firing control apparatus with all its accessories, tools and spares;
6. the mast with its rigging, the wireless aerials;
7. the "Sal" log and the mechanical log and their tools, equipment and spares; the echo sounding equipment with its accessories, tools and spares; the multispot direction finding apparatus with its accessories, tools and spares; the submarine signalling U.S. apparatus with the direction finder U.S. and its equipment tools and spares;
8. the periscopes and rangefinder with their apparatus, accessories, tools and spares; the Anschütz gyrocompass with four repeaters and their accessories, tools and spares; the magnetic compasses with their accessories, tools and spares;
9. the air purifying plant with all accompanying apparatus with their equipment, tools and spares; the individual life saving appliances with all their accessories and spares;
10. the complete outfit of the ship whether particularly appertaining thereto or not, as specified hereinafter and elsewhere in the Specifications.

Note: The accumulators, the electric cables, the telephones, the rolled steel material, the ship's boats, the main and auxiliary electric motors with switchgear shall be ordered in Poland.

THE SUPPLY DOES NOT INCLUDE :

1. the „Bofors“ gun 105 mm. L. 40 and its ammunition, accessories, tools and spares ;
2. the anti-aircraft „Bofors“ gun in twin mounting 40 mm. and its ammunition, tools and spares ;
3. two light machine guns and their ammunition ;
4. the wireless direction finder (goniometer) with its accessories ;
5. the rifles and their ammunition, tools and spares ;
6. the 5 pistols and their ammunition, tools and spares ;
7. the 20 torpedoes with their accessories, equipment and tools ;
8. the wireless apparatus and all their accessories, equipment, tools and spares ;
9. the crew's personal effects ;
10. the consumable stores.

These above mentioned objects shall be supplied by the Polish Navy.

Equipment and outfit shall be supplied by the Constructor in accordance with the official lists for the Netherlands Navy Submarine K XVIII, hereinafter mentioned (1, 2, 3, 4, 5), suitably adjusted to the requirements of the Specifications and in further lists (6, 7).

LISTS	PRICE (included in main contract price)
1. Detail ZEEINSTRUMENTEN (Nautical instruments) approved by Min. Res. 4-7-1931 IV A No. 89, altered by Min. Res. 1-8-1931 A No. III, with the exception of leads for electric sounding winch, books, instructions and charts	Fl. 1875.00
2. Detail SCHIPPER (Boatswains Store) approved by Min. Res. 4-7-1931 IV A No. 89, altered by Min. Res. 1-8-1931 IV No. III (corrected for 56 men)	Fl. 3203.00
3. Detail BOTTELIER (Stewards Store) approved by Min. Res. 4-7-1931 IV A No. 89 (corrected for 56 men)	Fl. 8223.00
4. Detail KOMMALIEWANT (Messroom) approved by Min. Res. 4-7-1931, IV A No. 89 (corrected for 56 men)	Fl. 2480.00
5. Detail MACHINIST (Engineers Store) approved by Min. Res. 5-10-1932 IV A No. 60	Fl. 2600.00
6. Electricians equipment and tools (see list part VII)	Fl. 10958.00
7. Armourer's equipment and tools (see list part VII)	Fl. 2200.00

Note: The above mentioned prices do not include prices for the consumable stores mentioned in the lists. If any article mentioned in these lists is also mentioned elsewhere in the Specifications it shall only be supplied once. The prices mentioned above shall be specified in detail in accordance with Art. 2, clause D (Detailed prices of equipment). If the net invoice prices should be less than those above specified, the contract lump price shall be reduced accordingly.

Certain parts of the equipment in the lists above (1-7) mentioned may be supplied in whole or in part by the Polish Navy. In the lists above there is a price stated for each list and these prices are included in the lump price stated in Art. 1 of this Agreement. The prices of each item of the lists are to be specified later. If the Polish Navy decides to supply any item in the list, the price for that item shall be deducted from the lump price.

If the Constructor supplies any item in the list, the price stated for the item will remain in the lump price. The cost of installing and putting in place of all the items mentioned in the lists above is included in the lump price and is independent of their being supplied by one or another party. The common spare parts supplied for the two submarines shall be in accordance with the list given in part VIII of the Specifications.

The supply of the vessels includes the putting in place and fitting on board by the Constructor of all the materials supplied either by the Polish Navy or by himself. The Polish Navy will deliver free to the Constructor at Vlissingen/Rotterdam in a time necessary for the normal progress of the work and of the trials, all material which has to be supplied by the Polish Navy.

The necessary information for the Constructor for making arrangements for the installations of the plant or equipment supplied by the Polish Navy must reach the Constructor within the period of two months dating from the date of a written request made by the Constructor to the Polish Inspection Committee hereinafter mentioned.

The delivery of the material supplied by the Polish Navy shall be made free to the works of the Constructor addressed to the Inspection Committee which will verify in the presence of the Constructor that the material arrived in good state, make as the case may be the necessary applications to, or claims against the forwarding agents, and attend in case of need to the clearing through the customs.

All supplies shall in every respect be in accordance with the indications, specifications and drawings annexed to this Agreement, the whole ready for working and sufficiently complete, so that the Polish Navy does not have to make good any omission on the part of the Constructor. In general the vessels are to be supplied completely finished, tested and entirely fitted out so that they are ready to enter in the service immediately after the final acceptance.

Art. 2.

SPECIFICATIONS, DRAWINGS AND DOCUMENTS:

A. Drawings attached to the Agreement. — Each original copy of the present Agreement has the following drawings attached:

1. general arrangement plan, longitudinal and horizontal sections and deck plan;
2. general arrangement plan, transversal sections;

3. scantling sections ;
4. lines plan ;
5. displacement and stability sheets ;
6. capacity of tanks ;
7. electric plans ;
8. general arrangement of engine room ;
9. Sulzer-Diesel type 6Q D42, working cylinder ;
10. Sulzer-Diesel type 6Q D42, scavanging pump ;
11. sea water piping system ;
12. engine circulating water system ;
13. fresh water system ;
14. high pressure air piping ;
15. low pressure air system (12 atm.);
16. fuel oil system ;
17. lubricating oil system ;
18. hydraulic system ;
19. ventilation system ;
20. ballasts system (kingstons and vents);
21. weight's plan.

Within two months signing of this Agreement, the Constructor will hand over six heliographic prints of the above mentioned drawings

B. Surveys and detail drawings. — Apart from any specified exceptions laid down in the Specifications and special difficulties of which the Inspection Committee shall be the judge in accordance with the instructions of the Polish Navy, no plans need to be submitted for approval to the Direction of the Polish Navy at Warsaw after this Agreement is signed; taking this under consideration, the Inspection Committee will consider and approve the detailed and execution surveys, and the sub-contracts drawn up in conformity with the Specification and attached drawings in accordance with the instructions of the Polish Navy.

The Constructor will present for approval the general and detailed plans before proceeding with any kind of work and these plans are to be sent in duplicate to the Inspection Committee which must return one of them signed within the periode mentioned below.

The Inspection Committee shall be enabled to study the construction surveys in the drawing offices of the Constructor and will, as far as possible, make its observations upon them, while the drawings are being prepared. The Inspection Committee must express its approval or definite comments in the shortest possible time. In case of urgency on a written request of the Constructor, this period shall not exceed five days if the representative of the Committee is on the spot, and ten days if he is away; if the installation to be approved is of a complicated nature, an explanatory note has to accompany the drawing.

All outside orders for which the approval of the Committee is required, are to be accompanied by the inspection and acceptance conditions and also by general drawings in the case of apparatus designed by a sub-contractor and by detailed drawings in the case of parts designed by the Constructor.

The Constructor will hand to the Inspection Committee the number of drawings to be fixed in each particular case necessary for the inspection of the supplies in his workshops and in those of the sub-contractor's. All outside orders shall specify the supply in triplicate of all the general and detail drawings of the apparatus or installations ordered, one copy being for the Constructor.

Offsets. — Within four months of the completion of the laying down the lines, the Constructor will hand over to the Committee six copies of the offsets.

C. Drawings and calculations, lines, weight, stability after laying down. — When the lines are laid off, the Constructor shall draw up within four months, under the supervision of the Inspection Committee and in conformity with the laying off, a lines plan, calculations for weight, stability and trim. Also the drawing of the cross curves of stability is to be supplied. These various documents shall be drawn up in conformity with the practice of the Netherlands Navy.

Within two months from the notification of acceptance by the Inspection Committee the Constructor shall supply six heliographic prints on white background of these documents and six copies of the calculations.

After final stability test, the calculations of stability and trim shall be done again using the actual weights and actual dimensions and shall include the laying down of the curves of the righting lever arm; they will be submitted for verification within two months after the test and the Constructor shall furnish a month after the return of the tracings, a copy on linen and six prints on white background of these curves and six copies of the calculations.

Three months after the final acceptance of the vessel, the Constructor shall hand over ten copies of the technical particulars (descriptive register), in accordance with the indications provided by the Inspection Committee taking as a pattern those for the Polish submarine "Wilk".

D. Drawings submitted for approval to the Polish Navy. — Within a maximum period of six months from the date of signature of this Agreement, the Constructor shall hand over to the Inspection Committee :

1. installations drawing of the internal combustion engines with sections of those engines ;
 2. drawings of the electrical installation, electric motors and the manoeuvring apparatus ;
 3. stowing plan of accumulators ;
 4. drawing of fixed and revolving torpedo tubes ;
 5. general drawings and specifications of couplings ;
 6. general drawings and specifications of accumulators ;
 7. installation plan of the guns ;
- with a view to their transmission to the Direction of the Polish Navy

The approval of these drawings must be communicated to the Constructor within a period of not more than two months from the date of handing them over. Any extension of this period is not to form the basis of a request for prolongation of

delivery period except insofar as this extension may affect the completion of the material supplied. An eventual rejection of these drawings, notified within twenty five days after their being dispatched, will not give right to the extension of delivery time.

Within one month after notification of the acceptance of the drawings by the Polish Navy, the Constructor shall hand over to the Inspection Committee six white heliographic prints.

If the drawings are accepted on the condition that the drawings shall be altered, this period of one month will run from the date of acceptance of the alterations by the Inspection Committee.

Documents drawn up after construction. — The Constructor will hand over to the Inspection Committee, as they are drawn up, the following regulation documents to be delivered to the officer in command when the vessel is fitted out :

- accomodation's plans, compartments, diagramatic plans of pipings, docking plans, table dealing with ballast tanks filling ;
- drawings in conformity with the construction of various auxiliary installations, of special apparatus, with necessary instructions or indications for the maintenance, for dismantling and for the use of these installations, three heliographic prints of these plans to be supplied.

Erection drawings. — At the beginning of the installation on board of the main engines, at the latest, the Constructor shall hand over to the Inspection Committee six complete sets of erection drawings of these engines.

Detailed list of equipment. — Three months after the installing on board of the main engines, the Constructor will hand over to the Inspection Committee ten copies of a detailed list of items of equipments supplied with information as to the individual value of each of them.

Instruction for use and maintenance of the various installations. — The list of instructions to be supplied for use and maintenance of the various installations will be submitted by the Constructor to the Inspection Committee within six months from the date of signature of this Agreement.

As soon as this list has been approved by the Inspection Committee, the Constructor shall draw up the instructions in English and shall hand them over successively within a maximum period of twelve months or as soon as possible to the Inspection Committee, which shall approve of them or shall ask for suitable modifications. Twelve copies of each of the final reports shall then be prepared and handed to the Inspection Committee six months at the latest after approval of the last of them.

Each report must include : the detailed description of the installation with plans and schematic diagrams and instructions for maintenance, working, dismantling and adjusting. As regards reports not originally proposed, the periods shall be decided upon by agreement between the Inspection Committee and the Constructor.

Drawings in conformity with the construction. — Within a period of three months dating from the definite acceptance of the first vessel, the Constructor shall hand over

to the Inspection Committee the tracings of the construction drawings, a list of which will be fixed in agreement with the Inspection Committee.

Six months after the definite acceptance of the approved list, the Constructor shall hand over twelve sets of the final drawings, drawn up and compiled similar as for the Polish submarines (type "Wilk").

At the same time as the final drawings, the Constructor shall hand over six copies of the complete weight estimate in conformity with the construction of all parts to be supplied.

At the same time the Constructor shall hand over a model of the vessel in accordance with its construction on a scale of about 1:100th (one hundredth).

Note: All the drawings and documents specified in sub-section D (documents drawn up after construction) of the present article are to be countersigned by the Inspection Committee. They are to be drawn up in accordance with the indications given by the Inspection Committee, notably with regard to the various details which are to be shown in the sets of drawings in conformity with the construction.

Penalties for delay. — In the case of delay in the submission of the drawings and documents specified under Nos. 1, 2 and 3 of the following table, the Constructor shall be liable to the penalties stipulated in this table.

The penalty per day indicated in each case applies for the whole of the drawings and documents included in the same batch to be forwarded whatever the number of pieces may be: the period of delay is fixed from the date of remittance of the last piece. In each case the duration of application of the penalty is limited to one hundred days.

The date of commencement of the penalties shall be that upon which they commence without any notification being necessary. This applies for all the cases of the present Agreement where there is a question of penalties.

As regards the date for the supply of the sets of drawings in conformity with the construction, the penalty shall only run from the day when the last tracing was signed by the Inspection Committee after approval of the tracings.

The time necessary for the Inspection Committee for examining and approval of the submitted instructions for handling and maintainance as well as the time necessary for suitable alterations in the said instructions, as asked by the Inspection Committee, shall be taken into account.

Nomenclature of the drawings and documents to be supplied with indications of the time of delivery and the penalties in case of delay.

DESCRIPTION OF THE DOCUMENTS	Total number of copies for all vessels.	TIME OF DELIVERY	Penalties per day delay in Fl.
1. Drawings attached to the Agreement:			
originals	2	At the signature of this Agreement.	—
heliographic copies ..	6	2 months after the signature of this Agreement	4

DESCRIPTION OF THE DOCUMENTS	Total number of copies for all vessels.	TIME OF DELIVERY	Penalties per day delay in Fl.
2. Various documents :			
lines plan, displacement calculations, weight, stability trim originals	1	4 months after completion of laying down.	—
copies	6	2 months after acceptance of the original	2
Laying of offsets	6	2 months after completion of laying off	2
Stability calculations after the inclining test :			
original	1	2 months after the inclining test	2
copies	6	1 month after return of the accepted original	4
Description register	10	3 months after the final acceptance of the vessel	4
3. Documents drawn up after the construction :			
erection drawings of main engines	6	At the beginning of the installation on board of the first main engine	2
detailed lists of equipment	10	3 months after the installing on board of main engines	2
Instructions :			
original	1	12 months after approval of the list	2
copies	12	6 months after approval of the last instruction of the list	4
Drawings in conformity with the construction :			
original	1	3 months after final acceptance of the first vessel ...	2
copies (one of which is a tracing cloth) ...	12	6 months after acceptance of the original	4
Detailed statement of weights	6	with the descriptive register	4

Art. 3.

DESCRIPTION OF THE VESSEL. — Each of the submarines shall be constructed in accordance with the Specifications and Drawings attached to the present Agreement. All these documents shall serve as a rule to define the undertaking of the Constructor and the latter may not depart from them without having been authorised to do so by the Polish Navy. In the case of disagreement between the drawings and the specifications, the evidence of the latter shall be valid. The principal characteristics of the vessels for a density of sea water of 1.005 are as follows :

length between perpendiculars	83.00 m.
length overall	84.00 m.
maximum breadth at water line	6.57 m.
maximum breadth	6.70 m.
depth amidships	6.35 m.
draft under keel amidships (about)	4.17 m.
draft under keel forward (about)	4.17 m.
draft under keel aft (about)	4.17 m.
displacement on the surface with appendices D_2 about	1110.00 m ³ .
displacement submerged with appendices D_1 about ...	1473.50 m ³ .
modulus of surface stability not less than	600 mm.
modulus of submerged stability not less than	225 mm.
number of propellers	2
maximum power on surface not less than	2 × 2370 H.P.
maximum power submerged not less than	2 × 550 H.P.
maximum surface speed not less than	20 knots.
maximum submerged speed not less than	9 knots.
normal amount of fuel oil about	67.5 tons.
normal radius of action at 10 knots speed not less than	3850 nautical miles.
total amount of fuel oil about	123.5 tons.
total radius of action with total amount of fuel oil at	
10 knots not less than	7000 nautical miles.
weight of the accumulator battery about	126 tons.
number of cells	200
radius of action submerged at 5 knots speed not	
less than	100 nautical miles.
diving depth not less than	80 m.
coefficient of flotability about $\frac{D_1 - D_2}{D_2}$	32.7 %.

The surface displacement is defined in the weight estimate stated in Art. 4.

Note: Diving must be carried out without difficulty in water of a density of 1.005 as well as in water of a density of 1.026.

ARMAMENT. — One gun "Bofors" type 105 mm. L 40, weight 3000 kg. 125 rounds weight 3000 kg.

One "Bofors" 40 mm. antiaircraft gun in a twin mounting, weight 2100 kg., and 1200 rounds, weight 2500 kg.

Tools and equipment for guns and ammunition 550 kg.
 Two light machine guns and their ammunition.
 Five rifles and their ammunition.
 Five pistols and their ammunition.
 Eight inside torpedo tubes in all of Netherlands Navy type for 550 mm. torpedoes with a caliber reduction for 533.4 mm. distributed as follows:
 four bow tubes,
 four stern tubes.
 Two sets of twin revolving tubes of Netherland's Navy type for 533.4 mm.
 Twenty torpedoes.

Art. 4.

The weight and the price of the material to be supplied can be devided approximately in accordance with the indications of the following table.

Re. number	DESCRIPTION OF ARTICLES	WEIGHT IN TONS		Price of the materials to be supplied in %
		Included in Constr. supply	Not included in Constr. supply	
A	Hull	441.10		16.0
B, J, K, L, M	Oil-engines, pipelines for water, oil, vent, fuel and lubrication oil, valves, kingstons, etc.	146.00	73.50	30.5
C	Electromotors	24.40		11.5
D	Battery	130.00		12.5
E	Electric light and power ...	17.50		3.5
F and G	Rudder, diving planes, anchor installations	20.00		3.0
H	Armament	48.90	44.25	10.5
N	Miscellaneous	22.15	1.95	10.0
O	Equipment and fittings, spares	13.00		1.0
P, R, U, V	Inventory, victuals, fresh water and crew	12.50	14.50	1.0
S and T	Paint, cement, tar and ballast	69.00		0.5
W	Trimming water	16.00		
X	Weight margin	15.25		
	Total	975.80	134.20	100.0

Note I: The surface displacement does not include the weight of material and spares not to be carried on board.

Note II: The above Specification of the fixed main price is given only by way of information.

Art. 5.

CONSTRUCTION. — The vessels are to be constructed at the shipyard of N.V. Koninklijke Maatschappij „de Schelde” and the N.V. Rotterdamsche Droogdok Maatschappij, the main propelling engines are to be constructed by Gebr. Sulzer, Winterthur, Switzerland, and the N.V. Koninklijke Maatschappij „de Schelde”.

The Constructor guarantees that the complete construction of the two submarines shall be identical.

The construction of all materials supplied shall be carried out with the greatest care in order to obtain the desired lightness while retaining the necessary strength.

The Constructor shall be authorized on his own responsibility and with the consent of the Inspection Committee, to repair by welding any steel castings possessing defects which do not jeopardise the general strength and their fitness for their duties.

Under the reserve of the contrary stipulations of the present Agreement, or of the attached Specifications, which form an integral part of it, there shall be applied the standard specifications of the Netherlands Navy and as far as they are applicable, the „Nederlandsche Normaal Bladen” (Netherlands Normal Sheets), up until 1st of January 1936.

In connection with any reference to the Netherlands Navy in this Agreement, it is understood, that if the Netherlands Navy refuses to allow the use of their rules and regulations, then the Constructor will prepare special rules and regulations in mutual agreement with the Polish Navy (Inspection or Acceptance Committees).

The materials employed in the construction of all the parts to be supplied, set forth in the Specifications, shall be of the best quality and shall be submitted to the standard tests adapted by the Netherlands Navy. All workmanship shall be first class and all the plant and equipment shall be carried out in every way to the satisfaction of the Inspection Committee, which shall have all the powers specified in the following: examining the work in question throughout the whole duration of its construction and rejecting all the parts of the plant which do not conform, from the point of view of strength, quality of the materials, and other necessary qualities, with the requirements of the Netherlands Navy, unless otherwise specified. No claim will be admitted in respect of additional payment arising from the rejection of material or of plant which has been faultily constructed.

The Constructor at the time of drawing up the working surveys shall add all details addition which, while not specially shown on the drawings or mentioned in the Specification, shall be found necessary by the Inspection Committee on the basis of up to date modern practice, as exemplified by the latest Netherlands Navy submarines of a similar type and, as permitted by the Netherlands Navy, additions and modifications of this nature do not entitle the Constructor to any indemnity. Generally, the first condition which all materials mentioned in the Specifications must fulfil, is, that they are capable of proper use in the normal conditions of service: the complete fulfilment of details is incumbent upon the Constructor.

If modifications in the conditions of the Agreement, in the Specifications or Drawings or alterations in arrangements already accepted by the Inspection Committee and partly carried out, are recognised as necessary either by the Inspection Committee or by the Constructor, they must be approved by the Polish Navy and by the Constructor. The above mentioned modifications required by the Inspection Committee may result in certain circumstances in an alteration in price, weight, stability, delivery time and in other matters affecting any or all the guarantees.

The Inspection Committee shall examine the demands of the Constructor and shall transmit them to the Polish Navy for definite approval.

In the case of disagreement as to the possibility of carrying out these modifications, either as regards their cost or as to the period required to undertake them, the disagreement shall be submitted to the arbitration as laid down in Art. 21 of the present Agreement.

If an alteration originally intended is not finally carried out, and if this has resulted in a temporary indecision which has caused delay in the construction, a supplementary period of time equal to the actual loss of time, shall be granted; the duration of the actual loss of time, if any, shall be determined by agreement between the Inspection Committee and the Constructor.

The good quality of the materials and apparatus which shall be ordered outside the Netherlands, shall be verified by agreement with the Inspection Committee.

The Diesel engines and the electric motors may not be shipped until after satisfactory completion of the tests at the works provided for in the Specifications attached to this Agreement.

WEIGHT. — The weights of the different parts of the material to be supplied shall be carefully ascertained in the course of the construction under supervision of the Inspection Committee; the same shall be the case with objects not forming part of the Constructor's supply.

DOCKING. — During the period of construction afloat, the vessels are not to remain afloat for more than six consecutive months. For this purpose the Constructor shall, at his expense, dock the vessels as often as shall be needed, and shall carry out at his expense all painting and other work found necessary by the Constructor and the Inspection Committee.

Art. 6.

SUPERVISION. — The construction of the supplies shall be supervised during the whole period of the Agreement, and in respect to all parts of the material to be supplied in the shops of the Constructor and in those of his sub-contractors by the Inspection Committee, which shall satisfy itself as to the quality of the materials employed, and of the care taken in the manufacture. This Committee shall carry out its function under conditions similar of those obtained in the Netherlands Navy, except as regards indications to the contrary effect in the present Agreement, and generally in accordance with the instructions of the Polish Navy.

The Inspection Committee shall be advised in writing two weeks in advance of the dates on which the various acceptance tests of the material and of the apparatus are to take place.

In case of the absence of a representative of the Inspection Committee, the tests shall take place without his attendance, the results of the tests shall have their definite value and the certificates of them will be forwarded to the Inspection Committee.

The Constructor agrees that the supervision referred to in the present article may be carried out in whole or in part by the Supervision Service of the Netherlands Navy, on any occasion in which the Polish Inspection Committee may consider this useful, and the Netherlands Navy agrees. The cost, if any, shall be borne by the Polish Navy.

In the yard and workshops of the vessels and of the main engines a suitable furnished office will be placed at the disposal of the Inspection Committee. Writing and drawing materials shall be put at the disposal of the Inspection Committee. No other expenditures relating to the functions of the Inspection Committee shall be at the Constructor's account.

Notwithstanding the exercise of this supervision, the Constructor shall retain his entire responsibility for the solidity, the satisfactory workmanship and the good working of all parts supplied by him.

Art. 7.

POLISH CREW ON BOARD. — From the beginning of shipping of the main engines, the Polish Navy may, if it considers advisable to do so, appoint several officers and petty officers to follow the finishing work of completing the vessel, and also the preliminary and acceptance trials, and this shall in no way modify the duties of the Inspection Committee.

If the Constructor requires, and the Polish Navy agrees to, the latter shall place on board the Polish officers and seamen for working the ship during the preliminary and official trials; this crew, in case of accident of any nature whatever, shall be free from all responsibility, normally incumbent upon the Constructor's personnel. The members of the crew shall be under the orders of the Constructor and shall comply with his instructions, but shall at all times remain the servants of and receive pay from the Polish Navy.

Art. 8.

DELIVERY. — In accordance with the requirements and stipulations of the present Agreement, the total time for the construction of the ship and the trials, tests and dismantlings provided by this Agreement is fixed at:

- 30 months for the first vessel.
- 33 months for the second vessel.

from the date of signature of this Agreement.

The above periods include all the tests and dismantlings of main and auxiliary engines, as customary in the Netherlands Navy; the dismantlings, however, not being effected further than to the extent indicated by the working of these installations during the trials and generally in agreement with the Acceptance Committee.

If the Acceptance Committee requires additional dismantlings work of main and auxiliary engines over and above the dismantlings carried out in accordance with the Netherlands Navy regulations, this may give cause to an alteration in the delivery time corresponding to the time necessary for the execution of this work, a period which shall be fixed mutually between the Constructor and the Polish Navy.

Art. 9.

DELAYS. — In the case of a delay in the delivery time stipulated in Art. 8 increased by the time agreed for the additional dismantlings, the Constructor shall be subject by way of penalty to a deduction (from the 11th instalment set forth in Art. 14) of

150 Fl. per day for the first thirty days,
300 Fl. per day for the next thirty days,
600 Fl. per day for the rest of the delay.

No penalty shall be applied for the delay concerning accessories and spare parts the absence of which does not prevent the vessel from being put into service.

In the event of any delay caused by "force majeure", the Constructor shall be allowed an extension of the delivery equal to the actual effect of the delay on the delivery of each vessel so caused, in mutual agreement with the Inspection Committee and approved by the Polish Navy and the Constructor.

"Force majeure" shall be understood to include: fire in the works or on board, earthquake, wars, strikes involving the majority of workmen in a particular trade at the works either of the Constructor or of a sub-contractor and not provoked by them, lockouts, the freezing up of waterways, unsuitable weather during trials, epidemics, floods. Abnormal damage in the course of testing to the ship, plant and equipment at the works or on board and accidents on land and on water are recognised as "force majeure" provided they are or not the fault of the Constructor, persons employed by him or for whose acts he is responsible as well as any other cause beyond the control of Constructor. As "force majeure" shall also be recognised any of the above stipulated cases even if they occur later than the date on which the vessel should have been delivered.

In case of rejection of important parts or of damages, greater than normal hazards, the Inspection Committee shall take into consideration the degree of importance of these parts and damages, and shall — as the case may be — fix an extension of the period which shall correspond to the effect of the delay involved by this rejection or these damages on the completion of the vessel. There shall be no extension of the period, in case of total or partial rejection or damage of an apparatus or an installation, in case when this rejection or these damages are the results from an error in design or execution (hidden faults excluded) on the part of the Constructor or of his sub-contractors, and when these rejections or damages occur during the shop trials for the accessories and during the preliminary trials for installations not tested in the shop.

As regards the material ordered by the Constructor in Poland, the dates for the delivery times stated in the orders to the sub-contractors shall be fixed by agreement between the Constructor and the Inspection Committee. In the case of delays as

regards these dates, the Inspection Committee will take into account the effect of these delays, on the completion of the vessel, and shall fix the extension of the delivery date in agreement with the Constructor. The same shall apply to materials ordered in Poland and rejected on delivery because of their non-accordance with the technical conditions agreed upon for same.

The Constructor shall notify the Inspection or Acceptance Committees, within a period of ten days, from the date when the "force majeure" occurred, or when its influence began to be felt. In the case of the Constructor failing to notify the above mentioned Committees, the Polish Navy shall not be called upon to recognise the validity of the cases of "force majeure", unless the Constructor is able to justify this omission: the regular marginal notes on a specification of the Constructor's work or on a ship's journal signed in the margin by a member of the Inspection Committee or Acceptance Committee, or by some person appointed by them, may permit the authentication of the date and the existence of such an occurrence and any other official documents will serve the same purpose, but this does not release the Constructor from the responsibility of notifying of this occurrence in writing to the Inspection or Acceptance Committees.

If the non-justified delay, according to the terms laid down in Art. 8 and elsewhere in the present Agreement, should extend itself beyond twelve months respectively three months in the special case mentioned in Art. 14, the Polish Navy shall have the option either to maintain further on the penal deduction provided for, or to put in hand the work, at the expense and risk of the Constructor, handing the work over to a shipyard selected by it, no judicial decision for authorisation thereto being required in this case, or to cancel the Agreement. In the case of cancellation, which shall be notified to the Constructor by registered letter, without other further formalities, the Constructor shall refund the Polish Government within a period of two weeks after the reception of this letter the total amount of the sums received on account of the vessel, the construction of which has been cancelled, (interests included), with an interest calculated at the rate as indicated in Art. 15.

The Polish Navy shall have also the right in such case, to make use of the rejection clause in Art. 12.

Art. 10.

ACCEPTANCE. — The acceptance trials of the vessel will be undertaken on the written request of the Constructor, in agreement with the Inspection Committee: this request shall be sent to the Inspection Committee one month before the date proposed for the beginning of these trials. Acceptance operations shall begin from the moment at which the trials of the main engines, electric motors and the principal and auxiliary installations can be practically and continuously pursued.

The acceptance shall be carried out by an Acceptance Committee, which shall satisfy itself that the hull, the propelling engines and the various installations have been properly executed and show the required strength, and that the ship can fulfil the various conditions for which it was built. The conditions to be fulfilled are those shown in the Specifications.

In default of such details being shown in the Specifications, recourse is to be had to the clauses in contracts of the latest date, passed by the Netherlands Navy for similar vessels, and generally in accordance with the practice of the Netherlands Navy.

The conditions of the bottom shall be verified in a dock if the Acceptance Committee will consider this necessary, and in the event of the bottom showing any defects, the necessary repairs shall be carried out by the Constructor and at his expense. The Acceptance Committee shall not have the trials and tests repeated which have already been made according to Art. 6; the reports of the tests carried out in the course of construction and in the works of the sub-contractors by the Inspection Committee shall be placed at the disposal of the Acceptance Committee (watertightness of compartments, hydraulic tests, trial measurements, power and output, etc.); the Acceptance Committee will content itself only with the observation of the effective working of these apparatus under the various conditions of service on board, without taking further steps as regards them. Following upon these inspection trials, the Acceptance Committee may, if it is considered a useful measure, have those installations which shown any defective working inspected by the Constructor at his own expense.

Before proceeding to the official trials, a preliminary diving test and a stability test will be undertaken, which will serve to determine the displacement conditions for the trials, taken into account the weights missing at the time of ascertainment in accordance with the provisions of the weight estimate.

The submerged trials, the torpedo firing trials and gunnery trials shall be carried out in one of the ports of the Netherlands, according to a mutual decision of the Acceptance Committee and the Constructor.

The Constructor shall bear the expenses in connection with the provision of his own personnel, of fuel and of the various materials for the carrying out of the trials, both preliminary and official. The torpedoes for torpedo trials shall be supplied by the Polish Navy, the Polish Navy shall undertake at its own expense the upkeep and handling in the ports of Vlissingen:Rotterdam of the torpedoes and their equipment, ammunition and other materials supplied by the Polish Navy, and shall provide means, personnel and material required for their upkeep in the storehouse. The Constructor shall undertake at his own expense the storage of these and shall place at the disposal of the Polish Navy without charge, apparatus for handling them in the stores. In the event of loss or of damage to the trial torpedoes, such not being attributable to the Polish Navy, the Constructor shall undertake at his expense replacement or repairs; the time involved in these operations cannot be invoked against the Constructor to delay the acceptance of the vessels and their being taken in charge by the Polish Navy. The wireless installation and the wireless direction finder shall be completely installed on board by the Constructor, under the direction and in accordance with the instructions of a specialist provided by the Polish Navy; their super-intendance and upkeep may be undertaken by the Polish Navy as soon as installed.

The programme of the trials of all installations including artillery and torpedoes, shall be drawn up by the Acceptance Committee in agreement with the Constructor. The Constructor shall make arrangements for a suitable furnished office to be placed at the disposal of the Acceptance Committee in the port of delivery.

The depot spare parts shall be finally accepted at the works in accordance with the same conditions as the similar materials for the vessels. After their acceptance, these depot spare parts shall be transported by the Constructor to the port of Vlissingen:Rotterdam or the port of Gdynia, where the Polish Navy shall take charge of them after having satisfied itself of their good state on arrival. The same will be done with the particular spare parts for each vessel, which are not taken on board.

Note: Before the pronouncement of the final acceptance of both the hull and the propulsion engines, the Acceptance Committee shall check up all the equipment material which the Constructor has to supply in accordance with Art. 2 of the present Agreement.

WEIGHT. — The Inspection Committee shall check up the draft marks when the vessel was docked for the first time. After the shipment and acceptance of the equipment material, and before the final acceptance trials, the Acceptance Committee will verify that the total of the weights specified for the materials to be supplied has not been exceeded. The Constructor shall place on board the necessary temporary ballast for compensating any missing weights, so as to enable the vessel to dive. The surface trial conditions shall be obtained by blowing all the main ballast tanks, when the vessel is submerged or in diving trim. This surface trial condition shall hereinafter be called the normal displacement. The amount of water let in and blown out of all the main ballast tanks, in accordance with the above mentioned procedure, shall not be less than 363 cubic meters.

In case of deficiency of the above mentioned figure, the Constructor shall be subject by way of penalty to a deduction per cubic meter of deficiency of:

100 Fl.	for a deficiency between 10 and 20 cubic meters.
200 .. .. .	.. .. 20 .. 30
300 .. .. .	.. .. 30 .. 40
400 .. .. .	.. .. 40 .. 50

Should there be a deficiency of more than 50 (fifty) cubic meters, the vessel may be rejected.

STABILITY. — The Committee shall proceed to the carrying out of stability tests on the surface and submerged for each submarine. In case of doubt as to the accuracy of the submerged test, the results may be checked in accordance with the Netherlands Navy practice.

For these tests on the surface and submerged, the vessel shall be brought to the same conditions as for the speed and radius of action trials both on the surface and submerged. The equipment parts, the position and storage of which may be changed on service, shall be placed in accordance with the indications of this Agreement; in the absence of any indications in this respect, the position shall be fixed by the Acceptance Committee in accordance with the probabilities of current navigation.

Suitable corrections shall be made for any weights, that are missing. An amount of sixteen tons of trimming water shall be carried on board, corrected by a suitable amount, corresponding to an excess of specific gravity of the water in which the trial takes place, over the specific gravity of 1.005; this trimming water shall be distributed in the midship regulating tanks, in the fore and aft trimming tanks and compensating tanks. Care shall be taken to reduce the free water surface as far as practicable.

The values of the modulus of stability (GM) must be at least sixty centimeters on the surface and twenty two and a half centimeters submerged.

The Committee shall have the curves of stability arms traced at the various angles for the surface and submerged conditions of various displacements; the calculation of stability shall be drawn up in accordance with the Netherlands Navy practice.

The practice ammunition and the gun tubes do not form a part of the normal displacement. The normal stores shall be distributed as provided for in the Specifications, and the above mentioned figures of stability shall be obtained on the condition that there are no free liquid surfaces present, with the exception of those mentioned above, for the trimming and regulating water.

If one of the surface or submerged modulus of stability (GM) is less than the above guaranteed figures, the Constructor shall be subject by way of penalty to a deduction per half centimeter of deficiency of:

300 Fl.	per half centimeter deficiency from 0 to 2 cm. incl.
700 .. .. .	.. .. . 2 .. 4
2000 .. .. .	.. .. . 4 .. 6
6000 .. .. .	.. .. . above 6 cm.

If the default in GM exceeds 10 (ten) cm. on the surface or 6 (six) cm. submerged, the vessel may be rejected.

Any fraction of a half centimeter shall be neglected.

The penalties for surface and submerged condition shall be added together if the necessity should arise.

Art. 11.

TEST BED TRIAL. — The test bed trial shall be held as described in § 181 of the Specification.

If the consumption of fuel oil at 4.4 load and 1.10 load exceeds by more than the tolerance of 5% (five percent) the figures stated in that paragraph, the Constructor shall be subject to a deduction by way of penalty per gramm of fuel oil per BHP hour over the 5% mentioned, of:

200 Fl.	per each gramm between 1—10 gms.
400 Fl.	per each gramm between 10—20 gms.

If the consumption shall exceed by more than 20 (twenty) gms, the figures stated in § 181, the engines may be rejected.

If the consumption of lubricating oil at 4.4 exceeds by more than the tolerance of 10% the figures in § 181, the penalty shall be

200 Fl.	per each 1/10 of a gram per BHP hour between 0.1—1.0 gms.
400 Fl.	per each 1/10 of a gram per BHP hour above 1.1 gms.

If the consumption shall exceed by more than 3 gms. the guaranteed figure, the engines may be rejected.

PRELIMINARY TRIAL. — Before the official trials of the propelling engines, in order of ascertaining whether they are in a state to be submitted to the acceptance trials, a preliminary trial at sea will be made, in the course of which the engines must run during two and a half hours at least without interruption at the mean number of R.P.M. fixed at the shop trials for three quarters power.

ACCEPTANCE TRIALS OF THE PROPELLING ENGINES.

The Acceptance Committee shall assure itself that the whole of the propelling plant fulfils the specified conditions and offers every necessary guarantee of good working, solidity and endurance.

In the course of one of the trips for the preliminary official trials torsionographs shall be fitted at the forward end of the shaft lines and their records examined at various speeds: from these records obtained and from the calculations of the relative amplitudes, drawn up during the construction, the maximum torsion stress in the shafts will be deducted. Generally, these stresses measured in this way shall not exceed 1/10th (one tenth) of the tensile strength, measured in the course of the acceptance tests of the forged shafts; they may vary between 1/10th (one tenth) and 1/6th (one sixth) in one or at most two ranges of speeds, each comprising about 30 (thirty) R.P.M.

The Constructor shall be subject by way of penalty to a deduction of 5000 Fl. if there shall be three such ranges instead of two. If in a range the stress exceeds the limit of 1/6th (one sixth), the necessary modifications shall be made.

In the event of any modification having to be made as above mentioned, the Inspection Committee shall fix the extension of the delivery time in accordance with the actual effect of the execution of these modifications on the delivery.

Any accidental peaks in the records submitted for examination, due to irregular working of the torsionographs or of the engines shall be ignored.

The Acceptance Committee shall assure itself by repeated tests:

- that the operations of starting, stopping and reversing of the engines can be effected with the required reliability and ease, by means of compressed air,
- that the starting up of the Diesel engines when cold must be effected in a satisfactory manner without any help from the electric propulsion motors: in the time of 10 (ten) seconds the engines must develop 300 (three hundred) R.P.M.; the change of direction of motion of the engines when running at 300 (three hundred) R.P.M. ahead to 300 (three hundred) R.P.M. astern must be effected within 25 (twenty five) seconds.

If the time required for starting the main engines, when cold, exceeds 10 (ten) seconds or if the time taken in reversing exceeds 25 (twenty five) seconds, the Constructor shall be subject for each of these tests by way of penalty to a deduction per one second in excess of:

250 Fl. per second in excess up to 5 sec. excess incl.

500 Fl. per second in excess from 5—10 sec. excess incl.

If the excess shall be greater than 10 (ten) seconds for starting the main engines when cold, or for reversing, the necessary alteration shall be carried out or the engines may be rejected.

The Acceptance Committee shall assure itself:

- that with each engine cold it is possible to carry out totally twelve consecutive starts, from the air bottles in the engine room.
- that the silencers are really effective,
- that the couplings between the Diesel engines and main electric motors work absolutely reliably and that the shafting of the electric motor starts rotating within 30 (thirty) seconds after actuating the Vulkan coupling. (The disengaging test shall be carried out after the speed trials and after the radius of action surface trial with the main engines running at a speed of 10 (ten) knots.)
- that the lubrication is effected with reliability when each engine is running astern for a quarter (¼) of an hour at 150 (hundred fifty) R.P.M.

The Acceptance Committee shall verify that the vessel when running ahead at a speed of 14 (fourteen) knots can be stopped within a distance not exceeding two and a half (2½) times her length, commencing from the moment when the order for astern movement was given.

In the course of one of the trips for the preliminary official trials, there shall be determined the minimum speed of the engines in running on a free course

TRIALS AT SEA. — GENERAL. — The sea trials comprise surface and submerged trials :

- a progressive trial at five speeds, including full speed,
- a full speed surface trial,
- an endurance trial of twenty four hours duration at three quarters power,
- a surface radius of action trial with the vessel at a speed of 10 (ten) knots,
- a test of engaging and disengaging of the couplings of the Diesel engines,
- a test of accumulators charging,
- a quick diving trial,
- a trial of ascertaining the time necessary for blowing the ballast tank when the vessel has returned to the surface,
- a deep diving trial,
- a submerged progressive trial,
- a full speed submerged trial,
- a submerged radius of action trial with the vessel at a speed of 5 (five) knots,
- a tactical diameter trial (surface and submerged),
- an armament test,
- a final acceptance trial after dismantling and inspection in the course of which the engines should for 3 (three) hours run at ¾ (three quarters) power of the full power and for 1 (one) hour reach the power shown during the full power trial.

For the purpose of the said trials the vessel shall be prepared for putting to sea in accordance with the loading condition as stated in Art. 4, and ready for diving without changing the weights other than by admitting the sea water into the main ballast tanks. After having admitted sea water into the main ballast tanks, the vessel shall obtain her submerged trim at a displacement which shall be assumed to be the official displacement for the submerged trials.

The ballast kingstons shall remain closed during the surface trials. Only the normal amount of fuel oil shall be carried on board. The kind of fuel and lubricating oil to be used, shall be the same which was used in the course of the shop trials in accordance with the specifications of the present Agreement.

In the course of the diving trials, the Committee shall assure itself that the vessel dives in a satisfactory manner, i. e. that she can dive, keep or change the submerged trim in a similar way and in similar weather conditions as the latest submarines of the Netherlands Navy.

For the submerged speed and radius of action trial, the vessel shall be navigated in the neighbourhood of such an immersion which permits the use of a periscope

There shall be practically no variation in the submerged trim of the vessel, and the deviation in draft shall by no way exceed 50 (fifty) centimeters when on the trial run; the hydroplanes shall also be kept as far as possible immovable; the mean trim shall be indicated by the Constructor. Only the navigating periscope in the conning tower shall be hoisted full up, the other may only be hoisted at the request of the Constructor. The removable handrails, the wireless mast and other removable items shall be folded or taken away.

The trials shall be carried out with all accessories and equipment, and in accordance with the Specifications.

All trials, with the exception of the endurance trial, shall be made on a smooth sea in calm weather, under the conditions laid down for the Netherlands Navy.

The displacement during the trial shall be that, described on the previous page with the allowance of 1% (one percent) more or less.

The speed during the full power and the radius of action trials should not be critical speeds. If the speed for the radius of action trial or the endurance trial were a critical speed, the Polish Navy in agreement with the Constructor shall decide the speed to be adopted and also the corresponding modification, either in the duration of the trial or in the technical results, premium and penalties in substitution of those in the Agreement.

As regards consumptions, a correction is to be proportional to the calorific value of the fuel which was used in relation to a theoretical fuel of a net calorific value of 10150 (ten thousand one hundred fifty) calories.

For the calculation of premiums and penalties, the results of the speed and consumption trials will be corrected according to the official normal displacement by means of the formulæ:

$$\frac{V}{V'} = \sqrt[3]{\frac{D'^{2/3}}{D^{2/3}}} \quad \text{and} \quad \frac{C}{C'} = \frac{D'^{2/3}}{D^{2/3}}$$

V' being the speed realised, V , the corrected speed for the calculation of premiums and penalties, D' , the displacement during the trial, D , that of the official normal displacement, C , the consumption at the trial, C' , the corrected consumption for the calculation of premiums and penalties.

THE PROGRESSIVE TRIAL. — Revolutions at 10 (ten) knots, full speed and three other speeds shall be each determined by the average of two series of three runs in the neighbourhood of 10 (ten) knots for the first, full power for the second and as agreed for the other runs. These trials can be made during the carrying out of the radius of action and the full power trial respectively. From the mean results so obtained there is to be constructed a graphic diagram of speed and revolutions and this diagram is to form a basis for the determination of speed during speed and consumption trials.

The number of revolutions for these trials shall be selected by the Constructor in accordance with the results of the progressive trials. If the average speeds during the radius of action and full speed trials shall differ by more than 0,3 (three tenth) knots from a speed measured on the measured mile during the progressive trials, new points on the curve of speed and revolutions shall be fixed, by the necessary runs on the measured mile (as indicated above) at the number of R.P.M. obtained during the radius

of action trial, respectively the full speed trial. If through the points measured a fair curve cannot be drawn, the necessary further points shall be measured and a mean curve constructed.

FULL SPEED SURFACE TRIAL. — The duration of this trial shall be six hours. During this trial the mean speed attained as measured by the R.P.M. on the basis of the results of the progressive trial must be equal at least to 20 (twenty) knots. This should be run in one straight course.

The lubricating and fuel oil consumption will be determined for the purpose of information only.

During this trial the number of R.P.M. of the Diesel engines shall not exceed four hundred sixty five (465) and the fuel oil consumption C shall not exceed by more than 5 (five) percent the consumption C ascertained in the shop tests.

In the case of an excess in the fuel consumption greater than 5 (five) percent, the results of the trial shall be corrected by the application of the formulæ:

$$V = V' \sqrt[3]{\frac{1.05 C}{C}}$$

The power is to be taken merely by way of information in view of the uncertainty of its determination on board.

In the case of the results for the maximum speed realized being less or more than 20 (twenty) knots, the Constructor shall be subject by way of penalty to a deduction and by way of premium to an addition, per 1/10 (one tenth) of a knot of:

445	Fl.	for a deficiency or excess in speed of 0.1 knots.
1780	.. .. .	.. .. . 0.2 ..
4000	.. .. .	.. .. . 0.3 ..
7110	.. .. .	.. .. . 0.4 ..
11000	.. .. .	.. .. . 0.5 ..
16000	.. .. .	.. .. . 0.6 ..
21800	.. .. .	.. .. . 0.7 ..
28450	.. .. .	.. .. . 0.8 ..
36000	.. .. .	.. .. . 0.9 ..
44500	.. .. .	.. .. . 1.0 ..
53750	.. .. .	.. .. . 1.1 ..
64000	.. .. .	.. .. . 1.2 ..
75150	.. .. .	.. .. . 1.3 ..
87000	.. .. .	.. .. . 1.4 ..
100000	.. .. .	.. .. . 1.5 ..

If the speed should be lower than 18.5 (eighteen and a half) knots, the vessel may be rejected.

In applying the premiums and penalties, fractions below 0.05 (five hundredth) of a knot shall be ignored, fractions equal to or greater than 0.05 (five hundredth) of a knot shall be counted to amount to 0.1 (one tenth).

ENDURANCE SURFACE TRIAL. — This trial is to be made at 3/4 (three quarters) power of the maximum power namely 3555 HP approximately. It ought to be carried out during a continuous period of 24 (twenty four) hours. In the course of this trial all main and auxiliary apparatus shall be examined and tested. The fuel

and lubricating oil consumption shall be checked for a purpose of information. This trial shall be run as far as practicable with the wind force (at open sea) of 4—5 (four to five) beaufort's scale and the behaviour of the vessel at sea shall be reported upon.

Note: If the deep diving trial shall have to be carried out in a distant place, in the sea, because of not availability of a suitable place near the Netherlands coast, this trial may be carried out in the middle of the endurance trial, which is to be interrupted for this purpose.

SURFACE RADIUS OF ACTION TRIAL WITH THE VESSEL AT A SPEED OF TEN KNOTS. — The duration of this trial shall be of eight hours. The trial shall be carried out with both engines running and the speed of the vessel being ten knots approximately (with an allowance of three tenth (0,3) of a knot more or less). The number of R.P.M. necessary to realize this speed shall be estimated on the basis of the results of the progressive trial on the measured mile. The fuel and lubricating oil consumptions shall be measured with care by a method adopted by a mutual agreement between the Constructor and the Acceptance Committee. The fuel consumption per mile at the speed of 10 (ten) knots shall be deduced from the consumption per mile at the average speed of the trial, by multiplying the latter by the square of the proportion of 10 (ten) knots to the average trial speed.

The capacity of the normal fuel oil tanks must be sufficiently great as to enable the vessel to attain a radius of action of three thousand eight hundred fifty (3850) sea miles at a speed of 10 (ten) knots.

The total capacity of fuel tanks in the vessel, the ballasts for carrying the reserve oil included, must enable the vessel to attain a radius of action of 7000 (seven thousand) sea miles at the same speed of 10 (ten) knots, the same fuel consumption per mile being assumed. The amount of lubricating oil carried on board must be proportional to the total amount of fuel oil available on taking the consumption of lubricating oil being proportional to the expenditure of the fuel oil mentioned, on the basis of the results obtained during the surface radius of action trial.

Both the radius of action are stated on the condition that no charging of accumulators is done; during the above trials the necessary electrical power for the working of the auxiliaries, of the steering motor if necessary, of the gyrocompass, of one fan and of the necessary lighting of the vessel (1/3 (one third) of the lamps), shall be taken from the battery, but the consumption of this electrical power shall be evaluated on assuming a consumption of 12 (twelve) kgms. of fuel oil per hour and added to the total consumption.

If the surface radius of action at the speed of 10 (ten) knots differs from 3850 (three thousand eight hundred and fifty) miles at the normal amount of fuel oil carried and from 7000 (seven thousand) miles at the total amount of fuel oil carried, the Constructor shall be subject by way of penalty to a deduction and by way of premium to an addition per each 20 (twenty) miles of:

200 Fl.	for excess or deficiency of	each twenty miles from
		100 miles to 200 miles
500	.. .. .	each twenty miles from
		200 miles to 300 miles
1000	.. .. .	each twenty miles from
		300 miles to 400 miles
2000	.. .. .	each twenty miles from
		400 miles to 500 miles

The premium and penalties shall be applied independently in the case of the normal and the total fuel oil amounts.

If the deficiency in the radius of action at either the normal or total fuel oil amount is more than 500 (five hundred) miles, the vessel may be rejected. No premiums shall be paid for any excess above five hundred miles.

Indicator diagrams shall be taken in the course of this trial by way of information.

TEST OF ENGAGING AND DISENGAGING OF THE DIESEL ENGINES COUPLINGS. — If the duration of the disengaging carried out, either in the shop, after any of the tests for the Diesel engines stipulated in the Specifications, or on board after the full speed or the 10 (ten) knots trial exceeds fifteen (15) seconds, when the Diesel engines are running, the Constructor shall be subject by way of penalty to a deduction of 500 Fl. per each 5 (five) seconds of excess over the above period. The penalties shall be applied for each test independently. If the duration of the disengaging operation of the above mentioned tests should exceed 30 (thirty) seconds, the tests shall be carried out again completely anew, or the couplings shall be rejected. If the shafting of the electric motors starts rotating later than 30 (thirty) seconds after actuating the Vulcan couplings, the Constructor shall be subject by way of penalty to a deduction of 500 Fl. per each 5 (five) seconds in excess over the above period. If the above period exceeds 60 (sixty) seconds, the couplings shall be rejected. The fraction of 5 (five) seconds shall be ignored.

TEST OF ACCUMULATOR CHARGING. — Recharging of the accumulator battery shall be carried out by one of the electric motors working as a generator and driven by the corresponding Diesel engine; the propeller shall be clutched in or declutched, under the provision that the torque exerted shall in no case exceed the maximum output of the Diesel engines and that the intensity of the charging current shall be selected in accordance with the Specifications, as indicated in the conditions for working of the electric motors as generators.

QUICK DIVING TRIAL. — The vessel shall proceed with both Diesel engines running at a speed of about 10 (ten) knots; all hatches, except that of the conning tower and the crew entrance hatch on the gun tower, and all air intakes shall be shut; trimming and regulating tanks in ready to dive condition, ballast kingstons opened and the ballast tanks previously blown by the turbo-blowers, all crew, the commander included, inside the vessel.

This trial shall be carried out in two ways: once, when the vessel is proceeding in ready to dive condition with its vents shut and ballast kingstons open and alternatively with its vents open and ballast kingstons shut.

At the alarm signal the Diesel engines shall be stopped and disengaged immediately, the electric motors engaged as fast as possible at an output of about 2:3 (two thirds) of maximum power, the upper conning tower, gun tower hatches and the exhaust valves of the silencer shut; the vents or alternatively the kingstons of the ballast tanks, and if necessary, the quick diving tanks shall be opened. The time elapsing between the alarm signal and the moment when the highest point of the vessel excluding the periscopes, shall be submerged to a depth of one meter, shall not exceed 45 (fourty five) seconds.

This trial shall not be carried out until after the crew has been suitably trained. At the request of the Constructor, this trial may be carried out in the course of the various diving trials or may be transferred to the end of these trials.

If the time of the quick diving as defined above is less than forty (40) seconds or more than 50 (fifty) seconds, the Constructor shall be subject by way of penalty to a deduction or by way of premium to an addition of:

500 Fls.	per one second	from 0 to 10 sec.	inclusive.
1000	.. .. .	10 .. 20	.. .. .
5000	.. .. .	..	above 20 seconds.

If the diving time exceeds 1 (one) minute and fifteen (15) seconds, the vessel may be rejected.

TRIAL OF BLOWING THE BALLAST TANKS, THE VESSEL BEING RETURNED TO THE SURFACE. — On being submerged the vessel shall be brought to the surface by blowing high pressure air into one of the ballast tanks and thus decreasing the weight of the ship, until the platform deck is just awash an air intake or hatch shall be opened and the turbo-blowers set in action. The time elapsing between the opening of the delivery valve of these blowers and the completion of the blowing of the ballast tanks shall not exceed 5 (five) minutes.

If the time necessary for blowing the ballast tanks as above indicated exceeds 5 (five) minutes, the Constructor shall be subject by way of penalty to a deduction of 500 Fls. per each 15 (fifteen) seconds of excess. If this time exceeds 7 (seven) minutes, the turbo-blowers shall be rejected. The fractions of 15 (fifteen) seconds shall be ignored.

DEEP DIVING TRIAL. — The vessel shall carry out on a convenient course a trial for resistance and tightness of hull by diving at progressive stages to a depth of 80 (eighty) meters, as measured from the bottom of the keel in accordance with the conditions laid down for the Netherlands Navy.

The hull shall sustain this trial without showing any appreciable permanent deformations. The general tightness of the hull and of the various apparatus and accessories shall be satisfactory during this trial.

The Committee shall assure itself that the service and bilge pumps work satisfactorily at a depth of over 70 (seventy) meters, but the output of the pumps shall then not be measured.

THE SUBMERGED PROGRESSIVE TRIAL. — This trial is to be run over a measured base of about half a mile at four agreed speeds including the maximum speed and the speed at five knots, to obtain the mean power input to the main motor armatures measured in volts and ampères at the main motor switchboards and also the mean power output of the two main battery groups measured at the respective main battery voltmeters and ammeters. Three runs are to be made for each agreed speed, and the average of averages of the three runs at each speed for power speed and revolutions is to be the recorded value. A graph of records is to be plotted comprising power input to main motor armatures, revolutions and speed, and this graph is to form the basis for the determination of speed and power during the full submerged speed and submerged radius of action trials.

FULL SPEED SUBMERGED TRIAL. — The duration of this trial shall not be less than 30 (thirty) minutes, and speed attained as measured by the R.P.M. on the basis of the results of the submerged progressive trial shall not be less than 9 (nine) knots. During this trial the electric motors shall be adjusted in such a way that the intensity of discharge of the batteries does not exceed the one hour rate of discharge, including the power used by the auxiliaries and lighting.

If the mean speed so determined is more or less than nine (9) knots, the Constructor shall be subject by way of penalty to a deduction or by way of premium to an addition as:

1000 Fls.	for a deficiency or excess in speed of 1/10 of a knot up to 2/10 inclusive.
4000	in speed of 1/10 of a knot from 3 to 4/10 inclusive.
9000	in speed of 1/10 of a knot from 5 to 6/10 inclusive.
18000	in speed of 1/10 of a knot above 6/10 inclusive.

If the full submerged speed shall be less than 8 (eight) knots, the vessel may be rejected.

In applying the premiums and penalties, fractions below 0.05 (five hundredth) of a knot shall be ignored, fractions equal to or greater than 0.05 (five hundredth) of a knot shall be counted to amount to 0.1 (one tenth).

SUBMERGED RADIUS OF ACTION TRIAL WITH THE VESSEL AT A SPEED OF FIVE KNOTS. — The duration of this trial shall not be less than two hours and the speed attained, as measured by the R.P.M. on the basis of the results of the submerged progressive trial shall be approximately about five knots (with an allowance of two tenths of a knot more or less). If the speed shall differ from the above mentioned figure, the trial shall have to be repeated.

The power of the electric motors shall be measured with care and the power necessary for attaining the speed of 5 (five) knots shall be ascertained by multiplying the measured power by the cube of the proportion of the speed of 5 (five) knots to the trial speed. The total consumption used during this trial by the gyrocompass, and as far as necessary, the cooling fans for the main electric motors, the trimming pump and the steering and hydroplane gears, and the lighting (2/3 (two thirds) of the lamps) shall be added to the total consumption of the main motors. The radius of action at 5 (five) knots shall be determined in accordance with the power ascertained as above mentioned, based on the capacity of the accumulator battery in accordance with the table incorporated in the specification. This radius of action shall not be less than 100 (one hundred) miles.

If this submerged radius of action at a speed of 5 (five) knots shall be more or less than 100 (one hundred) miles, the Constructor shall be subject by way of penalty to a deduction or by way of premium to an addition of 3000 Fl. per mile up to 10 (ten) miles inclusive, and of 6000 Fl. per mile above 10 (ten) miles. Fractions of a mile shall be ignored.

If the radius of action shall be less than 85 (eighty five) miles, the vessel may be rejected.

TACTICAL DIAMETER TRIAL. — The vessel being at the surface in a normal trim, at a speed of about 20 (twenty) knots and with both engines running at a practically the same amount of R.P.M. (the maximum difference allowed shall be five R.P.M.) it shall be verified that the mean tactical diameter of the turning circle is less than six times the length of the vessel, the rudder being put hard over once to the starboard and without the controlling gear being touched.

The vessel being submerged at the speed of about 5 (five) knots, it shall be verified in the same way that the mean tactical diameter of the turning circle is less than six times the length of the vessel.

If the mean tactical diameter is more than six times the length of the vessel when on the surface and six times when submerged — the Constructor shall be subject by way of penalty to a deduction of:

1000 Fl.	for each 10 meters up to 30 meters excess.
1500	10 .. from 30 to 60 meters excess.
2000	10 .. from 60 to 80 meters excess.
3000	10 .. above 80 meters.

If the excess is more than 100 (one hundred) meters, the necessary modifications shall be made or the vessel may be rejected.

ARMAMENT TEST. — The solidity of the installation of the 105 (one hundred and five) millimeters gun and the 40 mm. antiaircraft guns shall be tested in accordance with the Specifications and generally with the conditions laid down for the Netherlands Navy.

The Committee shall verify the working of the torpedo tubes by carrying out with each of them a torpedo launching test at the submerged speed of the vessel similar to such one at which the submarines of the Netherlands Navy, armed with the same kind of torpedo tubes launch their torpedoes: but this speed, however, should not be less than 5 (five) knots.

The torpedo launching tests on the surface shall be carried out in accordance with the conditions laid down for the Netherlands Navy.

FINAL ACCEPTANCE TRIAL AFTER DISMANTLING AND INSPECTION.

After all the trials have been carried out satisfactorily, the Acceptance Committee shall proceed by the care and at the expense of the Constructor to the dismantling and inspection of the main engines, and those auxiliaries where the Committee considers it necessary owing to any defective working which may have occurred during the trials. This dismantling and inspection shall be carried out in accordance with the Netherlands Navy practice.

Any delay for which the Constructor is responsible in the said operations shall give occasion for the imposition of the penalties set forth in Art. 9.

After the execution of the dismantlings and inspections and after the assembling and repairs of any defects observed by the Committee, a sea trip shall be undertaken in the course of which the Diesel engines are to realize for a period of 1 (one) hour the maximum power attained during the 6 (six) hours trial and for a period of 3 (three) hours 34 (three quarters) of the maximum power.

Note I: Before proceeding to any of the above mentioned trials, all instruments and measuring apparatus shall be checked for accuracy in the presence of the Acceptance Committee and the Constructor.

Note II: The Constructor reserves the right to repeat any trial or test at his own expense if he thinks the results have been affected unfavourably in any way whatever.

FINAL DELIVERY AND ACCEPTANCE. — It is the intention of the Polish Navy and of the Constructor to arrange the inspections and the trials so, that the final delivery of the vessel can take place immediately after the last official trial at sea and the final inspection of the hull in the dock.

From the beginning of the dismantling and subject to the completion of the store rooms, stowages for material and magazines, the delivery of the equipment and spare parts shall be begun, and the Polish Navy will take charge of them accordingly.

The material not placed on board shall be handed over to the Polish Acceptance Committee against receipts to the Constructor and the Acceptance Committee shall undertake the packing and the dispatch to Poland. As the Polish crew shall proceed to occupy its accommodations and make use of the installations, it shall take charge of them accordingly, after a counter inspection with the Constructor's representative.

After the dismantling and good working tests of the auxiliaries and the various installations of the vessel, the Polish Navy may successively take them in charge and will in such case be responsible for their handling and maintenance; consummable matters, lighting and heating of the vessel shall be supplied by the Constructor up to the time of the final acceptance of the vessel.

As soon as the good working trial has been completed, the Polish Navy may take charge of the maintenance of the hull proper; the Constructor shall at the request of the Polish Navy supply all the necessary material for maintenance of the hull and in particular of the necessary paint for one coat of paint of the hull above the waterline.

The main engines may be handed over and taken in charge by the Polish Navy as soon as the good working trial has been carried out.

Any consumable matters remaining on board at the time of final delivery shall be handed over by the Constructor to the Polish Navy at the price at which they were purchased, if desired by the Acceptance Committee.

Art. 12.

MODIFICATIONS DURING THE TRIALS. — If certain parts of the supplies do not satisfy the conditions specified in the present Agreement, defects which have been ascertained may involve either modification or rejection of the various parts; and the Constructor shall not raise as an objection the inspection exercised by the Polish Navy during their manufacture.

The defective parts shall be modified or replaced by the Constructor. If the modification exceeds the normal tests hazards, the Committee shall fix, in agreement with the Constructor, the period within which they are to be completed. In the case of any delay over and above this period, this period of additional delay shall be added to the general period of delay for estimating the penalties incurred according to Art. 9.

12-14

The necessary work shall be carried out either by the Constructor or by the Polish Navy, if the Constructor requests it and if the Navy consents. The Polish Navy may even undertake the work of its own accord on the account of the Constructor if it is of the opinion that its intervention is of a nature to accelerate the final delivery; the Constructor shall in all cases bear the expenses of these modifications, in agreement between the Constructor and the Polish Navy.

REJECTION. — In the case of rejection of the vessel, which can only take place for one of the reasons specified in this Agreement, the Polish Navy reserves the right either to apply the cancellation clause of Art. 9, or to retain the vessel as she is, with a reduction in price to be agreed upon between the Navy and the Constructor.

This reduction will exclude any other penalties for unsatisfactory results, but the penalties in regard to delay shall remain intact and shall be retained by the Polish Navy.

Art. 13.

PERIOD OF GUARANTEE. — The period of guarantee is fixed at 12 (twelve) months, counting from the day of pronouncement of the final acceptance by the Acceptance Committee.

In the course of this period, the Constructor may have a representative on board of the ship. This representative shall have the right to free board and lodging, and shall be treated in this regard, according to his rank as a Polish engineer officer or engineer petty officer.

If in the opinion of the Polish Navy, the conduct of this representative shall not be satisfactory, or in case of his illness, he shall be replaced by another representative.

The guarantee is limited to the repairs or replacements at Gdynia at the expense of the Constructor and within as short a period as possible, of parts broken or damaged on board, the breakage or damage being the direct and proved consequence of a hidden defect in the material supplied by the Constructor, or of faulty execution or design. In the latter case the Constructor shall grant to the Polish Navy an extension of guarantee period for one year after the occurrence of the accident for parts identical to the damaged one and only against similar damage to these. This guarantee does not apply to indirect damage whatever this may be, nor to damages arising from a case of force majeure or from the negligence on the part of the personnel.

Art. 14.

The price of the vessels which shall be financed for each vessel in accordance with Art. 15, shall be divided into 12 (twelve) instalments for the fixing of the interest, as is also indicated in Art. 15, as follows:

Number	Calendar months from the date of Agreement (approximat.)		Value in %	DATE when the payment of instalment is due.
	1st vessel	2nd vessel		
1.	—	—	10	On signature of this Agreement.
2.	4	4	9	After the laying down and the construction of the plating model is finished and 200 tons of hull material is ordered.
3.	6	7	6	After ordering main E. motors and main parts of oil engines and after 200 tons of hull material are delivered to the yard.
4.	10	12	5	When the circular hull is completely erected and 80 % riveted, and the principal auxiliaries are ordered.
5.	12	14	5	When 80 % of all the hull plates and the frames are erected but not riveted.
6.	14	16	10	When the pressure hull is riveted with the exception of the portable plates and $\frac{1}{2}$ of the columns of the oil engines are cast.
7.	15	17	10	When the first E. motor is received at the works and the 1st oil engine is erected at the works.
8.	16	18	10	When 80 % of the tanks have been tested for the first time and accepted.
9.	24	27	10	When the vessel is launched.
10.	25	28	10	When the vessel is ready for trial.
11.	30	33	10	At the final acceptance against delivery of the vessel.
12.	42	45	5	At the expiration of the guarantee period.
			100 %	

All additions and deductions in price mentioned in this Agreement shall be settled at the nearest instalment to the date on which their amount shall have been finally decided.

The Constructor shall use all due diligence to earn the payments of the second to the fourth instalments inclusive for each vessel not more than three months later in each case than the period stated in months against these instalments for each vessel as described in this article and provided that the progress of the construction need not be exactly as described so long as it is equivalent thereto. Any allowance for delay by "force majeure" and other shall be made for each of these instalments exactly as described for the delay in delivery in Art. 9 and elsewhere in this Agreement. In the event of failure on the part of the Constructor to carry out his undertaking in respect to any vessel, the Polish Navy may cancel the Agreement insofar as it relates to that vessel and make use of the rejection clause in Art. 12 and Art. 9.

Note: In the case of a divergency of opinion between the Constructor and the Acceptance Committee, i. e. difference of opinion concerning the amount of the premiums or penalties payable on the final acceptance of the vessel, the penalties or premiums in question shall be deducted from or added to the eleventh instalment according to the calculation of the Acceptance Committee. The difference of opinion is to be settled and the resulting sums paid within a period of three months from the date of the final acceptance of each vessel. For this purpose the Constructor shall be bound to submit to the Direction of the Polish Navy the necessary documents which may be required by the other for the justification of their claims. If necessary, the matter shall be referred to arbitration.

The due dates of the various instalments shall be verified by the Inspection Committee to whom the Constructor shall forward all the necessary documents to justify his claim. The date conferring the right to payment shall be that on which the invoice and all documents in evidence shall have been handed to the Committee. The interest calculated according to the terms of Art. 15 shall run from the thirty first day counted from the day on which a payment should have been made.

Each establishment of an instalment due shall be followed by the handing over to the Constructor of an official report of approval drawn up by the Inspection Committee or Acceptance Committee: the payment of the amount therein shall be made according to the conditions of Art. 15. The Constructor shall give the Inspection Committee twenty one days notice of his intention to claim any particular instalment.

Art. 15.

The Polish Navy shall pay to the Constructor the instalments mentioned in Art. 14 within thirty one days after they have become due. Each payment shall consist of zlotys, pounds sterling, Swiss francs and guilders in the proportions indicated in Art. 1.

Should any payment be deferred longer than thirty one days, interest shall be added to the benefit of the Constructor at the rate corresponding to the official borrowing rate of the Bank of Netherlands plus 1%, with a minimum of 4½% and maximum of 9% per year, added for any delay beyond the thirty one days indicated above. These interests shall be settled semi-annually the 1st of January and 1st of July of each year.

If any instalment is not paid after three months from the date of becoming due in accordance with Art. 14, the Constructor shall have the right to suspend all work on the vessel concerned, until the amount is paid: the delay in delivery of this vessel being extended accordingly.

Note: If any payment falls due at an earlier date than that foreseen in Art. 14, the time of three months mentioned hereabove shall not be counted from the actual date of becoming due, but from the date foreseen in Art. 14.

Claims for damages caused by the suspension, if made by the Constructor, may be referred to Arbitration for decision if the necessity arises.

In order to effect the above mentioned payments, the Polish Navy shall pay to the Constructor in cash not less than the following sums in zlotys, pounds sterling, Swiss francs and guilders expressed hereunder in percentages of the total price mentioned in Art. 1, but in no case more than the sums which have become due in accordance with the terms of Art. 14:

up to the 31st of March 1936	10 %
from the 1st of April 1936 till the 31st of March 1937	22,5 %
.. .. . 1937 1938	37,5 %
.. .. . 1938 1939	25 %
.. .. . 1939 the remaining sums.	

Art. 16.

All Netherlands customs duties and all other Netherlands taxes and imposts of every description payable in respect of any goods imported with the exception of goods supplied by the Polish Navy or of any documents executed or anything done in performance or for the purposes of this Agreement otherwise than in respect of a vessel of which delivery shall have already been taken by the Polish Navy, shall be borne by the Constructor.

Art. 17.

BANK GUARANTEE. — Before payment of each of the first three instalments mentioned in Art. 14, the Constructor shall deliver to the Polish Navy a bank guarantee from one of the banks at Rotterdam approved by the Polish Government. The form of the letter of guarantee shall be attached to the present Agreement. The Polish Government reserves to itself the right of not accepting the guarantee offer, without being bound to state the reason of non-acceptance. The guarantee shall be released by the becoming due of the fourth instalment, as stated in Art. 14.

OWNERSHIP OF MATERIALS. — At the moment of each payment to the Constructor of the sums mentioned in Art. 14 and 15, the ownership of the vessel according to the extent at that moment of her construction, of her accessories, materials, apparatus and generally of all that which may have been laid in for the ship in the Constructor's yard or elsewhere, is transferred by this fact to the Polish Navy without exception or reservation. The ownership clause shall be quoted by the Constructor in the case of all sub-contracts which involve payments in advance.

Art. 18.

INSURANCE POLICY. — At the beginning of the erection on the slips, the Constructor undertakes to take out an insurance policy covering the ship against all risks of fire, launching, stay in Netherlands ports and the carrying out of any trials. The sum covered by such policy should not be less than the total of the instalments paid by the Polish Government and should cover all the materials supplied by the Polish Navy and intended for these vessels.

This policy, a copy of which shall be handed over to the Polish Navy, shall stipulate that in the case of total loss or of the confiscation of the vessel, whatever may be the cause, the benefits of the insurance shall be transferred to the Polish Navy, up to the extent of the sums paid by it, the balance going back to the Constructor. This policy shall cease to be valid from the date when the Polish Navy takes charge of the vessel.

If the Constructor fails to insure or does not increase the sum insured as construction progresses, the Polish Navy may contract the insurance itself at the Constructor's expense, with an increase of ten percent; the insurance premium shall be deducted from the next instalment (Art. 14).

Art. 19.

SECURITY. — No security shall be required for the supply of material.

Art. 20.

PAYMENTS IN ADVANCE. — The Polish Government shall throughout retain the right of paying off any sums due from it in advance, at any time.

Art. 21.

ARBITRATION. — The present Agreement is to be interpreted in accordance with the Netherlands Civil Law. All disputes or disagreements, including those which are only by one of the parties recognised as such, which may arise between the Constructor and the Polish Navy with regard to this Agreement, shall be submitted to arbitration at 's-Gravenhage.

Each party shall designate its arbitrator, and the two arbitrators thus nominated shall, if the necessity arises, choose a third member who shall have the deciding vote. If one of the parties within fourteen days after notification by the other party to designate his arbitrator fails to do so, this arbitrator shall be nominated by the President of the Council of Arbitration of the International Chamber of Commerce of Paris, upon request of the party most concerned.

Should the two arbitrators within fourteen days after their nomination be unable to agree as to the choice of the third arbitrator, the third arbitrator shall then be appointed by the President of the Council of Arbitration of the International Chamber of Commerce of Paris, upon request of the party most concerned. There shall be no appeal against the arbitrator's decision.

The arbitrators shall decide how the expenses of arbitration are to be divided between the parties, as also any extension of delivery time, which may be granted by reason of the duration of the arbitration.

Art. 22.

All clauses of the present Agreement are binding for the Constructor, without it being necessary for the Polish Navy to require their application.

Art. 23.

The present Agreement as well as the Specifications are confidential documents which the Constructor undertakes not to communicate without authorisation of the Polish Navy; the same shall apply to the plans which the Inspection Committee shall designate as confidential. This clause shall be notified to the sub-contractors. This confidential provision shall be binding also for the Polish Navy in respect to any confidential matters designated as such by the Netherlands Navy.

Art. 24.

The Agreement and the Specifications are drawn up in duplicate in English, one copy is to be retained by the Polish Navy and the other by the Constructor. The Constructor shall deliver to the Polish Navy within a period of three months from the date of signature of this Agreement thirty copies of the Agreement and of the Specifications.

Art. 25.

For the execution of the present Agreement, the Polish Government elects domicile at the Polish Legation at 's-Gravenhage and the Constructor at his registered office at Vlissingen.

Art. 26.

COMMERCIAL PROPERTY. — The Constructor guarantees the Polish Government against all claims of third parties with respect to the laws governing "commercial property" (patents, plans, trade marks etc.).

Art. 27.

If the Polish Navy should decide to build for itself one or more boats in Gdynia from the plans of the submarines forming the subject of the present Agreement, the Constructor shall, as far as the restrictions of Art. 23 permit, furnish all working drawings and calculations, made by him for these vessels, against the cost price of these copies plus 50% for administrative expenditures, and give further technical assistance.

The remuneration for this technical assistance and further conditions should form the subject of a separate agreement.

Art. 28.

MORTGAGE. — The Constructor shall, before the payment of the second instalment in accordance with Art. 14, inform the Government Recorder of Ships Mortgages at Middelburg, of the ownership clause included in Art. 17, a copy of this letter countersigned by the Recorder being handed over to the Inspection Committee.

Art. 29.

Rear Admiral J. SWIRSKI executes this Agreement solely in his capacity as the representative of the Government of the Republic of Poland and he shall not be personally liable under this Agreement for anything done or omitted to be done by the Polish Navy.

For the

GOVERNMENT OF POLAND:

Rear-Admiral

(w.s.) J. SWIRSKI.

For the

N.V. KONINKLIJKE MAATSCHAPPIJ

„DE SCHELDE”:

(w.s.) H. C. WESSELING.