FOREWORD

THE POLICY of the Government of the United States of supporting the Union of Soviet Socialist Republics in its defense against Nazi aggression was set forth immediately after German invasion of Soviet territory on June 22, 1941. The policy of general support was announced by the Department of State on June 23, and on the following day the President amplified this policy by pledging all possible material assistance to any opponent of Hitlerism, with particular emphasis upon assistance to the Union of Soviet Socialist Republics. At their meeting at sea in August the President of the United States and the Prime Minister of Great Britain discussed plans for a joint production program to insure the complete and final defeat of Germany and Japan. In order that Soviet needs in the European war might be taken into account, the President and the Prime Minister proposed by cable to Premier Stalin that a joint meeting be held in Moscow to discuss Soviet needs and the quantities and types of supplies which might be furnished by the United States and Great Britain. Mr. W. Averell Harriman, representing the President, and Lord Beaverbrook, representing the Prime Minister, met with Soviet officials in Moscow on September 29, 1941. The discussions which took place from September 29, 1941, until the early morning of October 2, 1941, resulted in agreement as to the supplies which would be provided by the United States and Great Britain for the period from October 1, 1941, to June 30, 1942. These agreements were recorded in a document signed by the chief delegates of each of the participating governments. This document was the Moscow (First) Protocol.

The subsequent three protocols signed in Washington, London, and Ottawa and covering the three twelve months' periods from July 1, 1942, to June 30, 1945, were similar in form and content to the Moscow Protocol, although negotiations were carried on by diplomatic communications rather than by joint conferences. Canada, not a party to the first two protocols, became a signatory to the London (Third) Protocol and the Ottawa (Fourth) Protocol, joining the United States and the United Kingdom as a supplying country. Procurement and shipment of supplies continued without interruption from October 1, 1941, to May 12, 1945, despite the fact that the formal signature of the last three protocols took place several months after their effective dates.
At the conclusion of hostilities in Europe on May 12, 1945, shipments to the Soviet European Front were terminated, and protocol schedules were brought under review by the supplying countries in accordance with the terms of the Fourth Protocol. Supplies furnished by the United States after May 12 were limited to those required for the support of Soviet Forces in the Far East. The supplies listed in annex III of the United States Schedule of Supplies in the Fourth Protocol were included specifically for support of Soviet operations in the Far East. After the termination of the Fourth Protocol period on June 30, 1945, supplies listed in annex III which had not yet been shipped, together with other supplies for support of military operations in the Far East, were forwarded without the formal commitments of a protocol.

The Soviet Supply Protocols were primarily operating agreements and did not include financial arrangements. However, the London (Second) and later protocols provided for financial assistance in accordance with existing arrangements between the Union of Soviet Socialist Republics and the supplying countries. In the case of the United States, financial assistance was rendered from November 7, 1941, under the Lend-Lease Act of March 11, 1941, and in accordance with the terms of the Soviet master lend-lease agreement of June 11, 1942. Materials supplied from United States production under the protocols were financed almost entirely with lend-lease funds, only about 2 percent being purchased with Soviet cash resources. Supplies furnished to the Soviet Government after the close of hostilities on September 2, 1945, were provided under the terms of a separate agreement dated October 15, 1945, executed under the authority of Section 3 (c) of the Lend-Lease Act.

The Soviet Supply Protocols, while indicating the quantities of supplies which the United States committed itself to provide, do not indicate the extent to which materials were actually delivered to the Soviet Union. It is to be noted that United States offerings were reduced under the terms of the protocols by Soviet selections to accord with available shipping. Additional requests of the Soviet Government for urgently needed items were met wherever possible by additions to protocol schedules or by substitution for scheduled items. Shipping failures and resultant production curtailment and, in the Third and Fourth Protocols, shipments in excess of protocol commitments were factors which caused variance with original protocol plans. Information covering the supplies actually delivered to the Soviet Union during the war period may be found in the Twenty-First Report to Congress on Lend-Lease Operations and other publications of the United States Government.
## CONTENTS

**Foreword**

Moscow Protocol (First Protocol), *October 1, 1941 to June 30, 1942*

Confidential Protocol of the Conference of the Representatives of the U.S.A., U.S.S.R. and Great Britain which took place in Moscow from September 29th till October 1st, 1941

Annex No. 1: Program of Requirements for the Navy beginning from October, 1941, till the end of June, 1942

Annex No. 2: Program of Enquiries for Medical Instruments, Medicaments and Chemicals beginning from October 1941 till the end of June 1942

Annex No. 3: Supplies which Great Britain desires to obtain from the Soviet Union

Washington Protocol (Second Protocol), *July 1, 1942 to June 30, 1943*

Second Protocol

Annex I: President Roosevelt to Commissar Molotov

Proposed Second Protocol between the Union of Soviet Socialist Republics and the United States and Great Britain Covering the Period July 1, 1942 to June 30, 1943

Schedule of United States Stores

| Group I: Armament and Military Equipment | 19 |
| Group II: Various Material, Machinery and Industrial Equipment | 22 |
| Group III: Equipment and Materials for Specific Industries | 29 |
| Group IV: Food Products | 30 |
| Group V: Medical Supplies | 30 |
| Group VI: Naval Stores | 31 |
| Group VII: Electric Power Generating Equipment | 31 |

United Kingdom Schedule of Stores

| A. Military Supplies | 32 |
| B. Naval Supplies | 32 |
| C. Raw Materials | 33 |
| D. Food | 34 |
The Special Assistant to the President (Hopkins) to the Chairman of the Soviet Government Purchasing Commission (Belyaev) 35
Annex II: Text of Identic Note Dated July 7, 1942, Addressed by the Ambassador of the Union of Soviet Socialist Republics (Litvinoff) in Washington to the Secretary of State of the United States (Hull) and by the Ambassador of the Union of Soviet Socialist Republics (Maisky) in London to His Majesty’s Principal Secretary of State for Foreign Affairs (Eden) 46

LONDON PROTOCOL (Third Protocol), July 1, 1943 to June 30, 1944 49
Third Protocol 51
United States Schedule of Supplies and Shipments for the Third Soviet Protocol 53
Annex to Preamble 55
United States Schedule of Supplies and Shipments 55
Armament and Military Equipment 56
Quartermaster Goods 60
Medical Supplies 61
Locomotives and Flat Cars 61
Naval Stores 61
Additional Offer of Estimated Undelivered Balances as of June 30th, 1943, in Second Protocol 66
Shipping Weight of Non-Protocol Items Being Procured on Soviet Requisitions 66
Metals, Chemicals and Other Products 66
Industrial Equipment 71
Stockpiles 74
Food Products 74
United Kingdom Schedule of Supplies and Shipments 76
Programme of Supplies From the United Kingdom to the Union of Soviet Socialist Republics During the Period 1st July, 1943 to 30th June, 1944 77
# CONTENTS

<table>
<thead>
<tr>
<th>Group I. Armaments and Military Equipment</th>
<th>77</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group II. Various Materials</td>
<td>77</td>
</tr>
<tr>
<td>Group III. Industrial Equipment</td>
<td>78</td>
</tr>
<tr>
<td>Group IV. Quartermaster Goods</td>
<td>79</td>
</tr>
<tr>
<td>Group V. Medical Supplies</td>
<td>79</td>
</tr>
<tr>
<td>Group VI. Food Supplies</td>
<td>79</td>
</tr>
</tbody>
</table>

List of Soviet Requirements for Medical Supplies Mentioned in Group V

Canadian Schedule of Supplies

**OTTAWA PROTOCOL (Fourth Protocol), July 1, 1944 to June 30, 1945**

Fourth Protocol Between the Union of Soviet Socialist Republics and the United States, United Kingdom and Canada for the Period July 1, 1944 to June 30, 1945

United States Schedules of Shipping and Supplies

**Annex I**

| Group I. Aircraft and Aircraft Equipment | 95 |
| Group II. Military Supplies             | 95 |
| Group III. Naval and Marine Supplies    | 95 |
| Group IV. Foodstuffs and Related Products | 95 |
| Group V. Machinery and Equipment        | 95 |
| Group VI. Other Materials and Products  | 95 |

**Annex II**

| Group I. Aircraft and Aircraft Equipment | 96 |
| Group II. Military Supplies             | 97 |
| Group III. Naval and Marine Supplies    | 104 |
| Group IV. Foodstuffs and Related Products | 107 |
| Group V. Machinery and Equipment        | 111 |
| Group VI. Other Materials and Products  | 128 |

**Annex III**

| Group I. Aircraft and Aircraft Equipment | 141 |
| Group II. Military Supplies             | 142 |
| Group III. Naval and Marine Supplies    | 143 |
| Group IV. Foodstuffs and Related Products | 144 |
| Group V. Machinery and Equipment        | 144 |
| Group VI. Other Materials and Products  | 145 |

United Kingdom Schedule of Supplies and Shipments for the Fourth Soviet Protocol

Programme of Supplies From the United Kingdom to the Union of Soviet Socialist Republics for the Fourth Protocol Period

| Group I. Armaments and Military Equipment | 148 |
| Group II. Raw Materials                  | 149 |
| Group III. Industrial Equipment          | 149 |
| Group IV. Medical Supplies               | 149 |
Canadian Schedule of Supplies

<table>
<thead>
<tr>
<th>Group</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I. Military</td>
<td>155</td>
</tr>
<tr>
<td>Group II. Metals, etc.</td>
<td>155</td>
</tr>
<tr>
<td>Group III. Railway Equipment</td>
<td>156</td>
</tr>
<tr>
<td>Group IV. Industrial Equipment</td>
<td>156</td>
</tr>
<tr>
<td>Group V. Foodstuffs</td>
<td>156</td>
</tr>
<tr>
<td>Group VI. Services</td>
<td>156</td>
</tr>
</tbody>
</table>
MOSCOW PROTOCOL

First Protocol

October 1, 1941 to June 30, 1942
FIRST PROTOCOL


The Conference of the representatives of three powers—the U.S.A., U.S.S.R., and Great Britain which met in Moscow on September 29th 1941 and was held till October 1st 1941 has, on the basis of the statements made by the said representatives and of the investigation of submitted data, arrived at the unanimous decision concerning the provision of supplies, which will be made available at British and U.S.A. centres of production, for the Soviet Union by Great Britain and the United States of America within the period beginning from October 1941, till the end of June 1942. Great Britain and the U.S.A. will give aid to the transportation of these materials to the Soviet Union and will help with the delivery.

The list is as follows:

1. Aeroplanes

    Enquired for by the U.S.S.R.
    400 planes monthly, of which 300 bombers of short distance action and 100 fighters.

    Satisfied
    400 planes monthly of which 100 bombers and 300 fighters. From Great Britain—200 fighters monthly and from the U.S.A. 100 fighters and 100 bombers monthly.

2. Tanks (gun-type)

    1,100 monthly, small or medium, or both in any proportion.

    500 tanks monthly, of which small tanks not exceeding 50%. In addition to that, from Great Britain will be supplied per month 200 tankettes (with machine-guns), after that the number will be increased.

3. Anti-Aircraft Guns 37

    300 pieces per month. mm. or up (45 mm, 75 mm, 90 mm.) with ammunition.

    152 anti-aircraft guns, 90 mm, over the period of 9 months with ammunition from the U.S.A.
4. Anti-Tank Guns 37 mm or up to 60 mm with ammunition. 

5. Anti-Tank Rifles from 12 mm to 19 mm with ammunition.

6. Scouting Cars 2,000 cars per month and 10,000 lorries (3, 2, and 1½ tons) per month.

7. Field Telephone Apparatus With phonoinductor call 6,000 pieces per month: without feeding source 6,000 pieces monthly.

8. Field Telephone Cable (Seven strands type) 100,000 kilometers monthly.

9. Underwater Telegraph Cable (gutta-percha) 50 kilometers per month.

10. Submarine Cable 100 kilometers per month.

11. Aluminium 4,000 tons per month (excluding 5,000 tons shipped in September) and 500 tons of Rolled Duraluminium per month.

500 guns, 2-pdr (about 40 mm), with 1000 rounds per gun, within 9 months from Great Britain and 756 guns, 37 mm, before the end of 9 months from the U.S.A. Total 1256 guns.

14 mm – 200 rifles per month, with 200 rounds per rifle. After the end of this year the number will be increased to 250 rifles per month: and from March 1942 to 300 rifles per month and after that with a greater increase of the number of rifles and rounds from Great Britain. 5,000 cars in the next 9 months from U.S.A. Mr. Harriman proposes to investigate the possibility of increasing this number of scouting cars, and also to define the number of lorries to be delivered.

The question of supplying these articles will be cleared up in Washington, while however there is already now a chance of some deliveries of them.

In addition to 5,000 tons already on the way, 2,000 tons per month will be supplied from Canada during 9 months.

Besides, Mr. Harriman will investigate the possibility of supplying from the U.S.A. 2,000 tons of Aluminium and 500 tons of rolled duraluminium per month.
<table>
<thead>
<tr>
<th></th>
<th>Enquired for by the U.S.S.R.</th>
<th>Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Tin</td>
<td>1,500 tons per month</td>
<td>1,500 tons per month from Great Britain.</td>
</tr>
<tr>
<td>13. Lead</td>
<td>7,000 tons per month</td>
<td>7,000 tons per month from Great Britain.</td>
</tr>
<tr>
<td>14. Nickel</td>
<td>800 tons per month</td>
<td>The question of supplying this metal will be immediately investigated in Great Britain and in the U.S.A.</td>
</tr>
<tr>
<td>15. Molybdenum</td>
<td>300 tons per month</td>
<td>300 tons per month from the U.S.A.</td>
</tr>
<tr>
<td>16. Cobalt</td>
<td>10 tons per month</td>
<td>10 tons per month from Great Britain.</td>
</tr>
<tr>
<td>17. Copper Electrolytic</td>
<td>3,000 tons per month</td>
<td>3,000 tons per month from Great Britain.</td>
</tr>
<tr>
<td>18. Rolled Brass</td>
<td>5,000 tons per month</td>
<td>Part will be supplied by the U.S.A. and the balance will be taken into account with a view of finding supplies if possible.</td>
</tr>
<tr>
<td>19. Magnesium Alloys</td>
<td>300 tons per month</td>
<td>The quantity of possible deliveries will be cleared up in London and Washington.</td>
</tr>
<tr>
<td>20. Zinc Electrolytic</td>
<td>1,500 tons per month</td>
<td>Great Britain guarantees the supply of 1,500 tons per month, hoping that one-half of this quantity will be supplied from the U.S.A. without binding, however, the American Government.</td>
</tr>
<tr>
<td>21. Bimetal</td>
<td>3,000 tons per month</td>
<td>Great Britain and U.S.A. will examine the possibility of this metal being supplied.</td>
</tr>
<tr>
<td>22. Tubes and other manufactures of copper</td>
<td>300 tons per month</td>
<td>Mr. Harriman will recommend the supply of these materials.</td>
</tr>
<tr>
<td>23. Ferrosilicon</td>
<td>7,000 tons per month</td>
<td>The amounts of supplies will be examined in Great Britain and the USA.</td>
</tr>
<tr>
<td>24. Ferrochrome</td>
<td>2,000 tons per month</td>
<td>1,000 tons per month from the USA. The possibility of supplies being increased will be examined in Washington.</td>
</tr>
<tr>
<td>25. Armour Plate for Tanks</td>
<td>10,000 tons per month</td>
<td>The amounts of supplies will be investigated in Great Britain and in the U.S.A.</td>
</tr>
<tr>
<td>26. Hard Alloys and Cutting Tools</td>
<td>500,000 dollars per month</td>
<td></td>
</tr>
</tbody>
</table>
27. Silver-Steel 50 tons per month

28. High-Speed Steel 300 tons per month

29. Tool Steel (carbon and alloy) 1,500 tons per month
30. Calibrated Steel (carbon and alloy) 13,000 tons per month
31. Hot-rolled Steel (carbon and alloy) 7,000 tons per month

32. Steel Billets, Chrome-Silicon-Manganese 8,000 tons per month
33. Cold-Rolled Steel Strip 8,000 tons per month
34. Cold-Rolled Steel Sheet 8,000 tons per month
35. Tinplate 4,000 tons per month

36. Steel-Wire, in accordance with specification 7,000 tons per month
37. Steel-Wire-Ropes 1,200 tons per month
38. Steel Alloy Tubes 300 tons per month
39. Stainless Steel Wire 60 tons per month
40. Nickel Chrome Wire 70 tons per month

41. Barbed Wire 4,000 tons per month
42. Toluol 4,000 tons per month

Enquired for by the U.S.S.R.: The enquiry will be investigated; it is possible that deliveries will be effected.

Satisfied: The supply of these articles will be taken into consideration upon receipt of specifications.

The question will be investigated in Great Britain and in the U.S.A.

This has been examined by the American Delegation which assumes it possible that the Soviet enquiries will be satisfied. The answer can be given only upon investigation of the matter in the USA.

80 tons are already being supplied by the USA. This enquiry for 70 tons per month will be satisfied as far as possible by the USA.

It is assumed that this quantity can be supplied from the USA.

1,250 tons per month will be supplied beginning November 1941 from the USA. The possibility of these supplies being increased will be examined. Besides, 10,000 tons of TNT will be shipped early as possible, the monthly quantity to be advised from Washington as soon as possible.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity/Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.</td>
<td>Nitroglycerine Powder</td>
<td>3,000 tons per month</td>
</tr>
<tr>
<td>44.</td>
<td>Phenol</td>
<td>1,500 tons per month</td>
</tr>
<tr>
<td>45.</td>
<td>Petroleum-Products (Aviation Gasolines, Components to Aviation Gasolines, Lubricating Oils and Greases, Motor Gasolines, and Gas-Oil) according to specification</td>
<td>20,000 tons monthly</td>
</tr>
<tr>
<td>46.</td>
<td>Ethylen Glycol</td>
<td>120 tons per month</td>
</tr>
<tr>
<td>47.</td>
<td>Sodium Bromide</td>
<td>100 tons monthly</td>
</tr>
<tr>
<td>48.</td>
<td>Phosphorus</td>
<td>100 tons monthly</td>
</tr>
<tr>
<td>49.</td>
<td>Dibutil-Phtalate</td>
<td>300 tons monthly</td>
</tr>
<tr>
<td>50.</td>
<td>Dimethylaniline</td>
<td>300 tons monthly</td>
</tr>
<tr>
<td>51.</td>
<td>Diphenylamine</td>
<td>300 tons monthly</td>
</tr>
<tr>
<td>52.</td>
<td>Colloxylin Nitrocellulose Varnish</td>
<td>300 tons monthly</td>
</tr>
<tr>
<td>53.</td>
<td>Metal Cutting machine-tools in accordance with specification</td>
<td>1,200 pieces monthly</td>
</tr>
<tr>
<td>54.</td>
<td>Electric Furnaces</td>
<td>50 pieces monthly</td>
</tr>
<tr>
<td>55.</td>
<td>Forging and Press Equipment according to specification</td>
<td>4,000,000 dollars monthly</td>
</tr>
<tr>
<td>56.</td>
<td>Various Industrial Equipment</td>
<td>3,000,000 dollars monthly</td>
</tr>
<tr>
<td>57.</td>
<td>Diamonds</td>
<td>150,000 dollars monthly</td>
</tr>
<tr>
<td>58.</td>
<td>Abrasives</td>
<td>300,000 dollars monthly</td>
</tr>
<tr>
<td>59.</td>
<td>Graphitized Electrodes</td>
<td>400 tons monthly</td>
</tr>
</tbody>
</table>

The question of satisfying this enquiry will be investigated in Washington. Information is not available here and the matter is to be examined in the USA. Will be supplied from the USA.

The investigations will take place in London and Washington.

The investigations will take place in London and Washington.

It is assumed desirable to supply the Soviet enquiries, but there can be no guarantee of particular types or classifications. All machine-tools that can be furnished will be supplied to the USSR from Great Britain and the USA.

Will be supplied from Great Britain.

These articles can undoubt edly be supplied, but investigation in the USA is essential.

Will be supplied from the USA.
69. Crucible Graphite (Ceylon) 100 tons monthly  
   Some can be supplied from Great Britain and after investigation the exact quantity will be advised to Moscow.

61. Rubber 6,000 tons monthly  
   62. Jute 4,000 tons monthly  
   The enquiry will be satisfied by Great Britain.

63. Shellac 300 tons monthly  
64. Sole Leather 1,500 tons monthly  
   The USA has already released 3,000 tons. More might be released after investigation in Washington.

65. Wool 2,000 tons monthly  
   Will be released by Great Britain.

66. Army Boots 400,000 pairs monthly  
67. Army cloth 1,200,000 meters monthly  
   The figures of monthly supplies will be defined precisely in London and Washington.

68. Wheat 200,000 tons monthly  
   Is available in Canada, where there are large stocks.

69. Sugar 70,000 tons monthly  
   Great quantities are available in the Philippines and in the Dutch East Indies. Supplies will be from Great Britain.

70. Cocoa Beans 1,500 tons monthly  

71. The enquiry for the Navy (in accordance with the Annex) will be considered in London and Washington.

72. The enquiry for Medical Supply (in accordance with the Annex) will be considered in London and Washington. The American Red Cross has already agreed to give some of the items.

The enquiry of Great Britain for supplies from the U.S.S.R. (in accordance with the Annex) will be considered in Moscow.

In the event of the war situation changing and the burden of defence being transferred to other theatres of war it will be necessary for the three countries concerned to consult together, and to decide what adjustment of the present arrangement is necessary.

Moscow, October 1941.

W. A. Harriman  
Chairman of the Delegation of the U.S.A.

Beaverbrook  
Chairman of the Delegation of Great Britain.

[Seal] [Seal] [Seal]
ANNEX N. 1.

Program of Requirements for the Navy Beginning From October, 1941, Till the End of June, 1942.

1. Naval Ships
   a) Destroyers
till the end of 1941
   b) Antimagnetic Minesweeping Trawlers
till the end of 1941
   8 pieces.
   9 pieces.

2. Naval Armaments
   a) 130 mm 55 calibre gun barrels complete with locks and
      spare parts (Vickers).
till the end of 1941
   b) 127 mm “double purpose” guns complete with full set of
      spare parts and accessories, spare free tubes and set of
      ammunition.
till the end of 1941
   in the first half year of 1942
   Total
   150 pieces.
   100 pieces.
   200 pieces.
   300 pieces.

   c) 25–37 mm Naval automatic Anti-Aircraft guns complete
      with spare barrels, with spare parts and accessories and
      set of ammunition.
till the end of 1941
   in the first half year of 1942
   Total
   500 pieces.
   1000 pieces.
   1500 pieces.

   d) 12.7–14 mm Anti-aircraft Machine Guns on the ship’s
      mounting complete with spare parts and set of ammunitions.
till the end of 1941
   in the first halfyear of 1942
   Total
   1000 pieces.
   2000 pieces.
   3000 pieces.

3. Diesels and Motors for Ships Complete with Apparatus
   a) Capacity 1,100 – 1,800 H.P.
      600 r.p.m.
in the first halfyear of 1942
   b) Capacity 150 – 210 H.P.
      450 r.p.m.
in the first halfyear of 1942
   c) Spare parts for Diesels “Ruston” Capacity 75 H.P.
till the end of 1941
   d) Spare parts for Diesels “Ruston” Capacity 48 H.P.
till the end of 1941
   e) Gasolene or Diesel marine motors complete with all aggre-
gates.
      Capacity 1,000 – 1,200 H.P.
      2,000 r.p.m.
in the first halfyear of 1942
   f) Diesel-generators of direct current
   150 pieces.
   40 pieces.
   80 sets.
   80 sets.
   300 pieces.
220 Volts 18 – 20 kwt
800 r.p.m.
in the first half year of 1942
115 Volts 50 kwt
600 – 700 r.p.m.
in the first half year of 1942

4. **Ship Apparatus “Asdic”**
till the end of 1941

100 pieces.
50 pieces.
150 pieces.

**ANNEX N. 2**

Program of Enquiries for Medical Instruments, Medicaments and Chemicals Beginning From October 1941 Till the End of June 1942

<table>
<thead>
<tr>
<th>No.</th>
<th>Names of goods</th>
<th>Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cocainhydrochloricum</td>
<td>1000 kgs.</td>
</tr>
<tr>
<td>2</td>
<td>Novocain</td>
<td>3000 &quot;</td>
</tr>
<tr>
<td>3</td>
<td>Xeroform</td>
<td>5000 &quot;</td>
</tr>
<tr>
<td>4</td>
<td>Pilocarpin hydrochl.</td>
<td>30 &quot;</td>
</tr>
<tr>
<td>5</td>
<td>Chloramin</td>
<td>100,000 &quot;</td>
</tr>
<tr>
<td>6</td>
<td>Strophan tin amp.</td>
<td>750,000 amp.</td>
</tr>
<tr>
<td>7</td>
<td>Lanolin anhydricum</td>
<td>100,000 kg.</td>
</tr>
<tr>
<td>8</td>
<td>Sulfapyridin</td>
<td>30,000 &quot;</td>
</tr>
<tr>
<td>9</td>
<td>Sulfanilamide</td>
<td>65,000 &quot;</td>
</tr>
<tr>
<td>10</td>
<td>Pyramidon</td>
<td>30,000 &quot;</td>
</tr>
<tr>
<td>11</td>
<td>Luminal</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>12</td>
<td>Coffein purum</td>
<td>20,000 &quot;</td>
</tr>
<tr>
<td>13</td>
<td>Radix ipecacunae</td>
<td>3,000 &quot;</td>
</tr>
<tr>
<td>14</td>
<td>Theobromin purum</td>
<td>20,000 &quot;</td>
</tr>
<tr>
<td>15</td>
<td>Acidum benzoicum</td>
<td>10,000 &quot;</td>
</tr>
<tr>
<td>16</td>
<td>Cardiasol</td>
<td>500 &quot;</td>
</tr>
<tr>
<td>17</td>
<td>Natrum bromatum</td>
<td>30,000 &quot;</td>
</tr>
<tr>
<td>18</td>
<td>Kalium bromatum</td>
<td>30,000 &quot;</td>
</tr>
<tr>
<td>19</td>
<td>Emetin hydrochloricum</td>
<td>25 &quot;</td>
</tr>
<tr>
<td>20</td>
<td>Agar-Agar</td>
<td>100,000 &quot;</td>
</tr>
<tr>
<td>21</td>
<td>Papton sie.</td>
<td>3,000 &quot;</td>
</tr>
<tr>
<td>22</td>
<td>Mannit</td>
<td>500 &quot;</td>
</tr>
<tr>
<td>23</td>
<td>Maltosa</td>
<td>500 &quot;</td>
</tr>
<tr>
<td>24</td>
<td>Lactosa</td>
<td>1000 &quot;</td>
</tr>
<tr>
<td>25</td>
<td>Lacmus sie.</td>
<td>150 &quot;</td>
</tr>
<tr>
<td>26</td>
<td>Oleum cedrae pro mier.</td>
<td>150 &quot;</td>
</tr>
<tr>
<td>27</td>
<td>Leucoplatt in assortment of various sizes</td>
<td>500,000 pieces</td>
</tr>
<tr>
<td>28</td>
<td>Anatomical Nippers</td>
<td>250,000 &quot;</td>
</tr>
<tr>
<td>29</td>
<td>Chirurgical Nippers</td>
<td>200,000 &quot;</td>
</tr>
<tr>
<td>30</td>
<td>Koher’s nippers size 5&quot;</td>
<td>200,000 &quot;</td>
</tr>
<tr>
<td>31</td>
<td>Pean’s nippers size 5½&quot;</td>
<td>200,000 &quot;</td>
</tr>
<tr>
<td>32</td>
<td>Syringes “Record” à 2 gr. with 2 needles</td>
<td>200,000 &quot;</td>
</tr>
<tr>
<td>33</td>
<td>Syringes “Record” à 5 gr. with 2 needles</td>
<td>50,000 &quot;</td>
</tr>
<tr>
<td>34</td>
<td>Ditto – à 10,0 cc.</td>
<td>200,000 &quot;</td>
</tr>
<tr>
<td>35</td>
<td>Ditto – à 20,0 cc.</td>
<td>50,000 &quot;</td>
</tr>
<tr>
<td>No</td>
<td>Names of goods</td>
<td>Quantities</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>36</td>
<td>Needles with cannulae “Record” No 28 size 0,70 x 35 mm.</td>
<td>5,000,000 pieces</td>
</tr>
<tr>
<td>37</td>
<td>Ditto No 26 size 0,80 x 35 mm.</td>
<td>3,000,000 &quot;</td>
</tr>
<tr>
<td>38</td>
<td>Ditto No 23 size 0,90 x 40 mm.</td>
<td>1,000,000 &quot;</td>
</tr>
<tr>
<td>39</td>
<td>Ditto No 16 &quot; 1,20 x 50 mm.</td>
<td>1,000,000 &quot;</td>
</tr>
<tr>
<td>40</td>
<td>Needles for Blood Transfusion</td>
<td>150,000 &quot;</td>
</tr>
<tr>
<td>41</td>
<td>Still’s Scissors for removal of gypsum bandage</td>
<td>25,000 &quot;</td>
</tr>
<tr>
<td>42</td>
<td>Wound enlargers Gosse</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>43</td>
<td>Down Frischer’s hooks</td>
<td>10,000 &quot;</td>
</tr>
<tr>
<td>44</td>
<td>Folkman’s hooks, sharp, à 4 teeth</td>
<td>15,000 &quot;</td>
</tr>
<tr>
<td>45</td>
<td>Drills for intruding</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>46</td>
<td>Autoclaves 11,½ x 21” with 2 bix. sets and one lamp for warming</td>
<td>1,000 &quot;</td>
</tr>
<tr>
<td>47</td>
<td>Electromagnet of Milinger’s type (for eyes)</td>
<td>50 &quot;</td>
</tr>
<tr>
<td>48</td>
<td>Transportable Rontgen apparatus</td>
<td>100 &quot;</td>
</tr>
<tr>
<td>49</td>
<td>Translucent screens 30 x 40 cm.</td>
<td>1,000 &quot;</td>
</tr>
<tr>
<td>50</td>
<td>Ear Nippers</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>51</td>
<td>Backhouse’s clamps</td>
<td>20,000 &quot;</td>
</tr>
<tr>
<td>52</td>
<td>Scapel No 1</td>
<td>100,000 &quot;</td>
</tr>
<tr>
<td>53</td>
<td>Scapel No 3</td>
<td>100,000 &quot;</td>
</tr>
<tr>
<td>54</td>
<td>Amputation knives</td>
<td>20,000 &quot;</td>
</tr>
<tr>
<td>55</td>
<td>Cooper’s scissors</td>
<td>100,000 &quot;</td>
</tr>
<tr>
<td>56</td>
<td>Lister’s scissors</td>
<td>25,000 &quot;</td>
</tr>
<tr>
<td>57</td>
<td>Strait scissors with blunt points</td>
<td>100,000 &quot;</td>
</tr>
<tr>
<td>58</td>
<td>Babcock’s spinal needles</td>
<td>20,000 &quot;</td>
</tr>
<tr>
<td>59</td>
<td>Mattew’s needles Holders</td>
<td>25,000 &quot;</td>
</tr>
<tr>
<td>60</td>
<td>Sterilisors of various sizes</td>
<td>50,000 &quot;</td>
</tr>
<tr>
<td>61</td>
<td>Mayo-Hegar’s needle holders 6 inch box lock</td>
<td>25,000 &quot;</td>
</tr>
<tr>
<td>62</td>
<td>Farabeuf’s hooks</td>
<td>25,000 &quot;</td>
</tr>
<tr>
<td>63</td>
<td>Engel’s saws</td>
<td>30,000 &quot;</td>
</tr>
<tr>
<td>64</td>
<td>Link Down’s Respirators</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>65</td>
<td>Farabeuf’s curved respatories</td>
<td>15,000 &quot;</td>
</tr>
<tr>
<td>66</td>
<td>Farabeuf’s Forceps</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>67</td>
<td>Dalgren’s cranial rängeurs</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>68</td>
<td>Trachea tubes No 2</td>
<td>10,000 &quot;</td>
</tr>
<tr>
<td>69</td>
<td>Trachea tubes No 4</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>70</td>
<td>Trachea tubes No 6</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>71</td>
<td>Whiting’s rängeurs, curved</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>72</td>
<td>Down’s</td>
<td>5,000 &quot;</td>
</tr>
<tr>
<td>73</td>
<td>Surgical gloves, pairs</td>
<td>500 thousand pairs</td>
</tr>
<tr>
<td>74</td>
<td>Anatomical gloves, pairs</td>
<td>100 &quot;</td>
</tr>
<tr>
<td>75</td>
<td>Rubber warming pan</td>
<td>250 &quot;</td>
</tr>
<tr>
<td>76</td>
<td>Regular 1½ tests (lens) sets</td>
<td>300 pieces</td>
</tr>
<tr>
<td>77</td>
<td>Amputation saws</td>
<td>15,000 &quot;</td>
</tr>
<tr>
<td>78</td>
<td>Curved forceps</td>
<td>30,000 &quot;</td>
</tr>
<tr>
<td>79</td>
<td>Ice rubber bags</td>
<td>150 thousand pieces</td>
</tr>
<tr>
<td>80</td>
<td>Oileloth</td>
<td>1,000,000 meters</td>
</tr>
<tr>
<td>81</td>
<td>Haemostatic braids</td>
<td>100,000 pieces</td>
</tr>
<tr>
<td>82</td>
<td>Rubber tube for blood transfusion 5 mm.</td>
<td>3,000 kgr.</td>
</tr>
<tr>
<td>83</td>
<td>Richardson’s balls</td>
<td>150 thousand pieces</td>
</tr>
</tbody>
</table>
## Supplies Which Great Britain Desires To Obtain From the Soviet Union

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Quantity requested</th>
<th>Terms of delivery requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archangel Pitch.</td>
<td>50 tons.</td>
<td>Within 6–8 months.</td>
</tr>
<tr>
<td>Ammonium Perchlorate.</td>
<td>50 tons.</td>
<td>Within 6–8 months.</td>
</tr>
<tr>
<td>Aniline or Nitro-Benzine.</td>
<td>3,000 tons.</td>
<td>6 monthly deliveries, November to April</td>
</tr>
<tr>
<td>Barium Chlorate.</td>
<td>50 tons.</td>
<td>ditto</td>
</tr>
<tr>
<td>Bees Wax.</td>
<td>100 tons.</td>
<td>Over 12 months.</td>
</tr>
<tr>
<td>Belladonna Leaves.</td>
<td>Up to 10 tons.</td>
<td>Not urgent</td>
</tr>
<tr>
<td>Belladonna Root.</td>
<td>Up to 10 tons.</td>
<td>Not urgent</td>
</tr>
<tr>
<td>Bristles.</td>
<td>200 tons.</td>
<td>Over 12 months.</td>
</tr>
<tr>
<td>Chrome Ore.</td>
<td>10,000 tons.</td>
<td>Urgently</td>
</tr>
<tr>
<td>Chinese Wax.</td>
<td>5 tons.</td>
<td>Over 12 months.</td>
</tr>
<tr>
<td>Dimethyl-Aniline.</td>
<td>200 tons.</td>
<td>6–8 months</td>
</tr>
<tr>
<td>Ephedra.</td>
<td>10 tons.</td>
<td>6–8 months</td>
</tr>
<tr>
<td>Henbane.</td>
<td>Up to 5 tons.</td>
<td></td>
</tr>
<tr>
<td>Horsehair.</td>
<td>300 tons.</td>
<td></td>
</tr>
<tr>
<td>Licorice Root.</td>
<td>Up to 500 tons.</td>
<td>6–8 months</td>
</tr>
<tr>
<td>Lycopodium.</td>
<td>4 tons.</td>
<td>6–8 months</td>
</tr>
<tr>
<td>Magnesite.</td>
<td>15,000 tons.</td>
<td>6–8 months. 5,000 tons already shipped. Great Britain would return to the Soviet Union the magnesium yield of the quantities supplied by the Soviet Union.</td>
</tr>
<tr>
<td>Muriate of Potash.</td>
<td>5,000 tons.</td>
<td>By December</td>
</tr>
<tr>
<td>Oil of Coriander.</td>
<td>Up to 500 kgs.</td>
<td>Not urgent</td>
</tr>
<tr>
<td>Oil of Fennel.</td>
<td>Up to 500 kgs.</td>
<td>Not urgent</td>
</tr>
<tr>
<td>Pine Tar.</td>
<td>Up to 1,000 tons.</td>
<td>Urgent</td>
</tr>
<tr>
<td>Platinum.</td>
<td>1,400 kgs.</td>
<td>Urgent. 700 kgs at once.</td>
</tr>
<tr>
<td>Potassium Perchlorate.</td>
<td>50 tons.</td>
<td>6–8 months</td>
</tr>
<tr>
<td>Rifles and Ammunition</td>
<td>250,000, plus 1,000 rds each. Urgent.</td>
<td></td>
</tr>
<tr>
<td>Santonin.</td>
<td>1 ton.</td>
<td>6–8 months</td>
</tr>
<tr>
<td>Silk or Silk Waste.</td>
<td>500,000 lb.</td>
<td>By end 1941</td>
</tr>
<tr>
<td>Timber.</td>
<td>In quantities as shipping available.</td>
<td></td>
</tr>
<tr>
<td>Canned Salmon.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WASHINGTON PROTOCOL

Second Protocol

July 1, 1942 to June 30, 1943
SECOND PROTOCOL

The Government of the United States of America and the Government of the United Kingdom, desiring to continue their policy of full cooperation with the Government of the Union of Soviet Socialist Republics in the prosecution of the war against aggression, and in such cooperation to provide the Soviet Union with the maximum assistance possible in the form of military supplies, raw materials, equipment and food, hereby in conjunction with the Government of the Union of Soviet Socialist Republics declare:

Article I

The signatory Governments formally adopt as a Second Protocol the "Proposed Second Protocol between the Union of Soviet Socialist Republics and the United States and Great Britain covering the period of July 1, 1942 to June 30, 1943", as transmitted by the President of the United States with the concurrence of the Prime Minister of the United Kingdom to the Vice President of the Council of People's Commissars and People's Commissar for Foreign Affairs of the Union of Soviet Socialist Republics on May 29, 1942, a copy of which Proposed Second Protocol is hereto appended and marked "Annex I", and accepted on behalf of the Soviet Government by identic notes dated July 7, 1942 addressed by the Ambassador of the Union of Soviet Socialist Republics in Washington to the Secretary of State of the United States and by the Ambassador of the Union of Soviet Socialist Republics in London to His Majesty's Principal Secretary of State for Foreign Affairs, a copy of which is appended hereto and marked "Annex II", and which Proposed Second Protocol the signatory Governments have regarded as in effect since July 1, 1942.

Article II

The appropriate representatives of the three signatory Governments will continue with the formulation of detailed procurement and supply programs as contemplated in the Proposed Second Protocol with a view to their early completion and will make from time to time such adjustments and clarifications as may become necessary.

Article III

The Government of the United States and the Government of the United Kingdom have examined the requests of the Soviet Govern-
ment with regard to supplies of aircraft, aluminum, cobalt and nickel beyond those provided in the Proposed Second Protocol, as expressed in paragraphs a, b, and c of Annex II appended hereto. The decisions so far reached by the competent authorities in regard to these requests are embodied in Annex III to this Protocol.

WASHINGTON
October 6, 1942.

SUMNER WELLES
R. I. CAMPBELL
MAXIM LITVINOFF

Annexes
I, II and III

ANNEX I

President Roosevelt to Commissar Molotov

THE WHITE HOUSE
WASHINGTON

May 29, 1942

MY DEAR MR. MINISTER:

The heroic contribution of the Union of Soviet Socialist Republics to the common cause of civilization will forever be an inspiration to all free peoples. Your presence in the United States is a symbol of the unity of our cause and of our purpose.

The governments of the United States and of Great Britain desire further to cooperate with your nation in its valiant effort. In cooperation with the people of the Union of Soviet Socialist Republics and of the other United Nations, we are determined to eradicate for all time those forces which may at any time threaten the future peace of the world. We are most anxious to provide the maximum assistance possible in the form of military supplies, raw materials, equipment and food.

With the concurrence of the Prime Minister of Great Britain, I have the honor to submit to you herewith a statement of the resources our governments are in a position to make available to the Union of Soviet Socialist Republics for the year July 1, 1942 to June 30, 1943.

Cordially and sincerely,

FRANKLIN D. ROOSEVELT

His Excellency

VYACHESLAV MOLOTOV,
Premier and Commissar for Foreign Affairs
of the Union of Soviet Socialist Republics.
Proposed Second Protocol Between The Union of Soviet Socialist Republics and The United States and Great Britain Covering the Period July 1, 1942 to June 30, 1943

1. The Governments of the United States and the United Kingdom have been giving the most serious consideration to the munitions of war which we can make available to the Soviet Government during the coming year. In addition to possible limitations due to the shortage of ships, the controlling factor by the northern route is the quantity of shipping that can be escorted to ports of discharge. The limiting factor by the southern route is inland transportation from Persian Gulf ports.

2. Our respective Governments will make available for despatch from the ports of the United States, United Kingdom and other countries during the period 1st July, 1942 to 30th June, 1943, approximately 3,300,000 short tons to the northern ports and 1,100,000 short tons to the Persian Gulf ports. In the circumstances mentioned in paragraph 1, it is our opinion that this is the highest practicable export programme from all sources at which we can now aim. Within the limits imposed from time to time by the factors mentioned, we will supply the shipping necessary to lift that part of this program for which U.S.S.R. ships cannot be made available.

3. The schedule of stores which the United States can make available has been drawn up in the light of the programme of requirements as submitted to the United States Government by the U.S.S.R. The schedule of stores offered by the United Kingdom has been drawn up on the assumption that Russia desires to continue to receive supplies on the scale agreed at the Moscow Conference. The stores listed in these two schedules amount to approximately 8,000,000 short tons.

4. It will be necessary for the Soviet Government to select from these schedules a programme of particular supplies and munitions of war for procurement and despatch, which will come within the amounts mentioned in paragraph 2. This programme should include all cargoes to be transported after 1st July, 1942, including protocol and non-protocol items either already on order or to be ordered.

5. It is to be understood this programme is subject to variations to meet unforeseen developments in the progress of the war. But you may be sure that every effort will be made to deliver the particular supplies which you designate.

6. The United States will be pleased to extend financial arrangements to cover its part of the proposed new protocol and all adjustments thereof. The United Kingdom financial arrangements will continue as at present, i.e. cash-credit agreement of 16th August,
1941, to cover civil supplies and Lend-Lease agreement now under negotiation to cover war-like supplies, the terms of which have been agreed in principle.

7. We, of course, stand ready through appropriate officials to discuss with your representatives in Washington all detailed questions pertaining to the schedules listed below and any reasonable adjustments that may be desired.

8. Above all, we want to assure you that we have a full understanding of the vital importance of your front and the urgent necessities of moving supplies to it in the highest possible volume and in the shortest space of time.

9. With this in mind, we shall be glad to review the programme from time to time to see if increased quantities of munitions can be provided and delivered.
Schedule of United States Stores

The United States government undertakes to make available to the Union of Soviet Socialist Republics the following schedule of stores aggregating some 7,000,000 short tons valued at three billion dollars, of which there are 1,110,000 tons of military and naval equipment, armament and ammunition valued at two billion dollars, 1,800,000 tons of materials, machinery and industrial equipment worth four hundred million dollars and 4,300,000 tons of food products worth six hundred million dollars.

The following schedule has been prepared on the basis that any balances which may be due from the existing Protocol after June 30, 1942, are included, as well as all articles contained in the new Protocol for which requisitions have been previously approved with delivery scheduled after June 30, 1942. The schedules indicate availability at centers of production.

In the schedule, the item numbers and major classifications correspond to those in the U.S.S.R. Program of Requirements, submitted April 2, 1942. For certain items the amounts to be made available are indicated as combined offerings of the United States and the United Kingdom and appear as a combined figure in the schedules of both governments.

GROUP I. Armament and Military Equipment

Item 1. – Airplanes
Amount requested: 4,200
Airplanes will be supplied through October 1942 at an average rate of 100 pursuits, 100 light bombers, and 12 medium bombers per month. Commitments will be made for the balance of the year on the basis of developments incident to the progress of the war.

Item 2. – Tanks with Armament
Amount requested: 5,250
7,500 tanks with armament: First six months, 1,572 light and 1,428 medium tanks; second six months, 2,250 light and 2,250 medium tanks; all as nearly as possible in equal monthly installments.

Item 3. – Anti-aircraft Guns, 90MM.
Amount requested: 204
204 90mm. anti-aircraft guns, complete with ammunition, made available at the following rate: 8 per month for first quarter; 16 per month for second quarter; 20 per month for third quarter; 24 per month for fourth quarter.
Auxiliary equipment will be provided in the same proportion as is made available to United States troops.

**Items 4 and 6. – Anti-aircraft Guns, 37MM., 45MM., 12.7-20MM.**
Amount requested: 3,000 – 37mm. and 45mm.
360 – 12.7-20mm.
3,360 substitute units, 37mm., or twin 20mm. on self-propelled mount without director; to be furnished at following successive quarterly rates: 300, 720, 1020, 1320.

**Item 5. – Anti-Tank Guns, 50-57MM. Complete With Ammunition**
Amount requested: 2,100
1,900 57mm. at rate of 200 per month during period October through May, and 300 for June.

**Items 7 and 8. – Machine Guns, Complete With Ammunition, .38 Cal. and Thompson Sub-Machine Guns .45 Cal.**
Amount requested: 120,000 – .38 cal.
127,878 – .45 cal.
240,000 at rate of 20,000 per month. No .38 cal. in production.

*Note.* Ammunition for all weapons will be supplied in the same proportion as for United States troops, and, if practicable, in an amount equal to the accuracy life of weapons.

An effort will be made to provide spare parts as follows:

<table>
<thead>
<tr>
<th>Spare engines</th>
<th>20 per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare propellers</td>
<td>20 per cent</td>
</tr>
<tr>
<td>Airplane spare parts</td>
<td>20 per cent of cost of plane</td>
</tr>
<tr>
<td>Engine spare parts</td>
<td>15 per cent of cost of engine</td>
</tr>
<tr>
<td>Propellor spare parts</td>
<td>15 percent of cost of propellor</td>
</tr>
<tr>
<td>Tank parts</td>
<td>1 year maintenance</td>
</tr>
<tr>
<td>Trucks</td>
<td>10 per cent of cost</td>
</tr>
<tr>
<td>Guns</td>
<td>6 months maintenance</td>
</tr>
</tbody>
</table>

Actual spare parts furnished will conform to a spare parts list which is based on experience.
Spare part production is lagging in the United States; and if actual deliveries are below the rates stated above, they will be made in the same proportion as for United States troops.

**Item 9. – Scout Cars**
Amount requested: 24,000
6,000 scout cars at rate of 500 per month and 18,000 jeeps at rate of 1,500 per month.

**Item 10. – Trucks**
Amount requested: 120,000
120,000 trucks at rate of 10,000 per month.

**Item 11. – Field Telephones**
Amount requested: 144,000
144,000 field telephones at rate of 12,000 per month, of which one-half will be sound powered.

**Item 12. – Field Telephone Wire**
Amount requested: 1,200,000 Km.
480,000 Km. of field telephone wire at 40,000 Km. per month.
SECOND PROTOCOL

Item 13. – Toluol and TNT
Amount requested: 36,000 short tons – Toluol
24,000 short tons – TNT
24,000 tons of toluol at rate of 2,000 tons per month and 24,000 tons of TNT at rate of 2,000 tons per month.

Item 14. – Nitroglycerin or Other Powder
Amount requested: 36,000 tons
Type and amount to be made available are subject to further negotiation.

Item 15. – Stereoscopic Observation Instruments for Artillery
Amount requested: 1,200 in 100 units
Not available.

Item 16. – Military Field Glasses
Amount requested: 3,000
Not available.

Item 17. – Motorcycles
Amount requested: 36,000
10,500 motorcycles, at rate of 500 per month July through September, and 1,000 per month thereafter.

Item 18. – Prime Movers for Artillery
Amount requested: 7,200
2,400 prime movers for artillery at rate of 200 per month, of which a part will have slow speed transmissions.

Item 19. – Toboggans (Motor Sleds)
Amount requested: 2,400
2,000 toboggans at rate of 200 per month September through June.

Item 20. – Radio Sets of Various Types
Amount requested: 12,000 units
11,500 radio sets of various types. Specific types are to be negotiated and to be made available at the following rates:

100 in July
1,100 in August and September
2,350 in October
2,475 in November
1,225 in December
525 each month from January to June, 1943.

Item 21. – Radio Locators of Various Types
Amount requested: 1,000
None available at this time. Type under development.

Item 22. – Radio Locators for Installation in Aircraft
Amount requested: 2,500
None available at this time. Type under development.

Item 23. – Radio Tubes
Amount requested: 2,000,000
2,000,000 radio tubes to be furnished on schedules to be arranged.
Item 24. – Generators, Gas-Driven
Amount requested: 10,000
10,000 gas driven generators to be furnished on schedules to be arranged. To be supplied without tents.

Item 25. – Absolute Radio Altimeters
Amount requested: 2,500
No absolute radio altimeters available.

Item 26. – Radio Beacon, Blind Landing Equipment, and Homing Devices
Amount requested: 250 sets
None available

Item 27. – Radio Direction Finders (Various Types)
Amount requested: 250 sets
150 sets of radio direction finders at rate of 50 per month November through January.

Item 28. – Measuring and Test Equipment
Amount requested: $1,000,000 worth
$1,000,000 worth of measuring and test equipment on schedules to be arranged.

Item 29. – Radio Repair Trucks for Field Use
Amount requested: 250 units
No radio repair trucks available.

Item 30. – Dry Cells for Field Telephones
Amount requested: 1,500,000
1,500,000 dry cells for field telephones on schedules to be arranged.

Item 31. – Dry Cell Batteries for Use With Radio Equipment
Amount requested: 400,000
400,000 dry cell batteries for use with radio equipment, on schedules to be arranged.

Item 32. – Radio Components, Parts and Accessories
Amount requested: $500,000 worth
$500,000 worth of radio component parts and accessories for maintenance and repairs to be furnished on schedules to be arranged.

Item 33. – Field Repair Shop, Light, for Tanks and Trucks
Amount requested: 100 units
No light field repair shop for tanks and trucks available.

Item 34. – Field Repair Shop for Brigade Tank Division
Amount requested: 120 units
90 units of field repair shops, each consisting of approximately 12 trucks, at rate of 10 units per month, October through June.

GROUP II. Various Material, Machinery & Industrial Equipment

Item 1. – Marine Cable
Amount requested: 1,200 Km.
1,200 Km. in equal monthly installments.
SECOND PROTOCOL

Item 2. – Submarine Cable
Amount requested: 600 Km.
600 Km. in equal monthly installments.

Item 3. – Aluminum Ingots
Amount requested: 48,000 short tons
24,000 long tons in equal monthly installments.

Duraluminum
Amount requested: 18,000 short tons
6,000 long tons in equal monthly installments.

Item 4. – Nickel
Amount requested: 9,600 short tons
Combined United Kingdom and United States at rate of 600 short tons per month for first six months; subject to review for second six months. This amount includes nickel in all forms to be made available, including alloys with steel, nichrome wire, and other materials requiring nickel in the specifications, except munitions.

Item 5. – Molybdenum
Amount requested: 9,600 short tons
4,000 short tons in equal monthly installments.

Item 6. – Copper Electrolytic, Copper Reserve
Amount requested: 36,000 short tons
7,500 short tons
Combined United Kingdom and United States, 120,000 long tons in equal monthly installments. This includes copper in all forms, including refinery shapes, brass and wire mill products, copper base alloys and copper content of finished products other than ammunition.

Item 7. – Rolled Copper (Cartridge Brass, Etc.)
Amount requested: 102,000 short tons
102,000 short tons in equal monthly installments, subject to copper limitations indicated in Item 6.

Item 8. – Magnesium Alloys
Amount requested: 3,600 short tons
None available.

Item 9. – Zinc, High-Grade
Amount requested: 12,000 short tons
18,000 short tons in equal monthly installments, combined United Kingdom and United States.

Item 10. – Bimetal
Amount requested: 36,000 short tons
12,000 short tons in equal monthly installments, subject to copper limitation indicated in Item 6. Bimetal of types used for thermostats is unavailable.

Item 11. – Copper Goods and Tubes
Amount requested: 15,000 short tons
15,000 short tons in equal monthly installments, subject to copper limitation indicated in Item 6 above.
Item 12. — Ferrosilicon  
Amount requested: 9,600 long tons  
Combined United Kingdom and United States, 12,000 long tons in equal monthly installments.

Item 13. — Ferrochrome  
Amount requested: 9,600 long tons  
Combined United Kingdom and United States, 7,200 long tons in equal monthly installments.

Item 14. — Armor Plate  
Amount requested: 48,000 long tons  
12,000 long tons in equal monthly installments, provided types desired are available. Subject to nickel limitation indicated in Item 4.

Item 15. — Hard Alloys & Cutting Tools  
Amount requested: $9,000,000  
$9,000,000 worth to be furnished on schedules to be arranged. Subject to nickel limitation indicated in Item 4.

Note. Items 16—34 inclusive, as listed below, can be made available tentatively, but are all subject to specifications and sizes available in the United States and subject to nickel limitation indicated in Item 4.

Item 16. — Cold Drawn Steel Drill Rods  
Amount requested: 960 long tons  
120 long tons in equal monthly installments.

Item 17. — High Speed Steel  
Amount requested: 6,000 long tons.  
3,000 long tons in equal monthly installments.

Item 18. — Tool Steel  
Amount requested: 24,000 long tons  
10,200 long tons in equal monthly installments.

Item 19. — Cold Drawn Carbon & Alloy Steel Rods & Bars & Aircraft Steel  
Amount requested: 168,000 long tons.  
129,600 long tons in equal monthly installments.

Item 20. — Hot Rolled Steel (Carbon Alloy & Aircraft)  
Amount requested: 150,000 long tons  
96,000 long tons in equal monthly installments.

Item 21. — Chrome-Manganese Silicon Steel Billets  
Amount requested: 120,000 long tons  
84,000 long tons in equal monthly installments.

Item 22. — Cold Rolled Steel Sheet  
Amount requested: 96,000 long tons  
84,000 long tons in equal monthly installments.

Item 22-a. — Cold Rolled Steel Strip  
Amount requested: 96,000 long tons  
84,000 long tons in equal monthly installments.
Item 23. — Stainless Steel
   Amount requested: 10,800 long tons
   3,000 long tons in equal monthly installments.

Item 24. — Tinplate
   Amount requested: 60,000 long tons
   60,000 long tons in equal monthly installments.

Item 25. — Steel Wire
   Amount requested: 96,000 long tons
   55,920 long tons in equal monthly installments.

Item 26. — Steel Wire Rope
   Amount required: 24,000 long tons
   14,400 long tons in equal monthly installments.

Item 27. — Steel Alloy Tubes
   Amount requested: 36,000 long tons
   21,600 long tons in equal monthly installments.

Item 28. — Stainless Steel Wire
   Amount requested: 1,200 long tons
   360 long tons in equal monthly installments.

Item 29. — Special Alloy Wire
   Amount requested: 240 long tons
   240 long tons in equal monthly installments.

Item 30. — Nickel Chrome Wire
   Amount requested: 480 long tons
   480 long tons in equal monthly installments.

Item 31. — Barbed Wire and Staples
   Amount requested: 60,000 long tons
   50,400 long tons in equal monthly installments.

Item 32. — Steel Tubes
   Amount requested: 350,000 long tons
   252,000 long tons in equal monthly installments.

Item 33. — Hot Rolled Steel & Plates Under 5½” Thick & Under 72” Wide
   Amount requested: 120,000 long tons.
   96,000 long tons in equal monthly installments.

Item 34. — Bolts, Nuts, etc.
   Amount requested: 12,000 long tons
   12,000 long tons in equal monthly installments.

Item 35. — Other Metals and Steel Products
   Amount requested: $10,000,000
   Fulfillment depends upon specifications.

Item 36. — Phenol
   Amount requested: 18,000 short tons
   12,000 short tons in equal monthly installments.

Item 37. — Petroleum Products
   Amount requested: 240,000 short tons
   240,000 short tons in equal monthly installments.
   Types and schedules to be arranged.

732148—47—3
Item 38. – Ethylene Glycol
Amount requested: 2,400 short tons
2,400 short tons in equal monthly installments.

Item 39. – Sodium Bromide
Amount requested: 2,400 short tons
1,800 short tons in equal monthly installments.

Item 40. – Phosphorus
Amount requested: 2,400 short tons
2,400 short tons in equal monthly installments.

Item 41. – Dibutyl Phthalate
Amount requested: 3,600 short tons
3,600 short tons in equal monthly installments.

Item 42. – Dimethylaniline
Amount requested: 3,600 short tons
3,000 short tons in equal monthly installments.

Item 43. – Diphenylamine
Amount requested: 3,600 short tons
1,800 short tons in equal monthly installments.

Item 44. – Colloxylin
Amount requested: 4,800 short tons
4,800 short tons in equal monthly installments.

Item 45. – Methanol
Amount requested: 12,000 short tons
12,000 short tons in equal monthly installments.

Item 46. – Urotropine
Amount requested: 7,200 short tons
4,600 short tons; 300 in July and August, and 400 per month thereafter.

Item 47. – Hexagen
Amount requested: 6,000 short tons
None available.

Item 48. – Ammonia Chloride
Amount requested: 4,800 short tons
4,800 short tons in equal monthly installments.

Item 49. – Mercury (Metallic)
Amount requested: 300 short tons
300 short tons in equal monthly installments.

Item 50. – Potassium Nitrate
Amount requested: 3,600 short tons
3,600 short tons in equal monthly installments.

Item 51. – Ammonium Cyanide
Amount requested: 3 short tons
3 short tons in equal monthly installments.

Item 52. – Centralite
Amount requested: 600 short tons
600 short tons in equal monthly installments.
SECOND PROTOCOL

Item 53. — Resarin (Resorcinol)
Amount requested: 120 short tons
120 short tons in equal monthly installments.

Item 54. — Barium Peroxide
Amount requested: 300 short tons
300 short tons in equal monthly installments.

Item 55. — Strontium (S. Oxilate)
Amount requested: 96 short tons
96 short tons in equal monthly installments.

Item 56. — Rodalie (Rhodamine B)
Amount requested: 6 short tons
6 short tons in equal monthly installments.

Item 57. — Torium (T. Nitrate)
Amount requested: 3 short tons
3 short tons in equal monthly installments.

Item 58. — Cerium (C. Chloride)
Amount requested: 18 short tons
18 short tons in equal monthly installments.

Item 59. — Cresol
Amount requested: 1,200 short tons
1,200 short tons in equal monthly installments.

Item 60. — Potassium Sulphate
Amount requested: 1,800 short tons
1,800 short tons in equal monthly installments.

Item 61. — Anthracene
Amount requested: 3,600 short tons
None available.

Items 62, 63, 64, 65, and 68 1 2
Machine tools: Amount requested: 21,000 each.
Electric Furnaces: Amount requested: 600 each
Forging Presses & Hammers: Amount requested: $48,000,000 worth.
Various Industrial Equipment: Amount requested: $36,000,000 worth.
Graphite Electrodes: Amount requested: 6,000 long tons.

1 Note: Will be made available in quantities totaling an aggregate value of 150 million dollars, the amount and type of the specific items to be arranged at the earliest possible date and subject to limitations on copper and nickel.

2 The following letter, dated July 7, 1942, from W. L. Batt, Chairman of the Requirements Committee, to Maj. Gen. A. I. Belyaev, Chairman of the Soviet Purchasing Commission, explains the Item 68.

DEAR GENERAL BELYAEV:

I wish to call your attention to an error in the proposed second Protocol. Under Group II, Item 68 has been incorporated with Items 62, 63, 64, and 65, with the qualifying statement that within a specified aggregate value the quantity and types of the specific items will be arranged at an early date, subject to limitations on copper and nickel. Item 68 refers to graphite electrodes, which, of course, contain neither copper nor nickel.

"Item 68—Graphite Electrodes should not have been included with these other items and its inclusion in this place was the result of a clerical error. Actually, it was our intention to offer a total of 4800 long tons of graphite electrodes to be made available during the twelve months' period of the Protocol in equal monthly installments. I wish you would therefore make a corresponding change in the program as presented to you and notify the members of your Commission concerned with this subject.

"Sincerely yours,

W. L. BATT
Chairman"
Item 66. – Industrial Diamonds
   Amount requested: $1,800,000 worth.
   None available in the United States.

Item 67. – Abrasives
   Amount requested: $6,000,000 worth.
   $3,600,000 worth in equal monthly installments.

Item 69. – Bearings
   Amount requested: 8,500,000.
   Supply depends upon specific sizes.

Item 70. – Balls and Rollers
   Amount requested: 28,000,000.
   28,000,000 in equal monthly installments, provided sizes are spread generally through the range of American production.

Item 71. – Sole Leather
   Amount requested: 18,000 short tons.
   No sole leather available except as included in finished shoes.

Item 72. – Army Boots
   Amount requested: 4,800,000 pairs.
   2,400,000 pairs of army shoes at rate of 200,000 pairs per month.

Item 73. – Army Cloth
   Amount requested: 18,000,000 yards.
   18,000,000 yards of army cloth at monthly rate of 1,500,000 yards, in ratio of 60 per cent for overcoating and 40 per cent for suiting.

Item 74. – Electrical Power Cables
   Amount requested: 12,000 Km.
   12,000 Km. in equal monthly installments, subject to copper limitation indicated in Item 6.

Item 75. – Webbing
   Amount requested: 36,000,000 yards.
   36,000,000 yards of tubular type webbing at 3,000,000 yards per month. No other type available.

Item 76. – Tarpaulin
   Amount requested: 24,000,000 yards.
   None available.

Item 77. – Vistanex (Molecular Wt. 60)
   Amount requested: 300 short tons.
   None available until the spring of 1943. The amount available will depend upon the development of the U. S. synthetic rubber program.

Item 78. – Tires and Tubes
   Amount requested: 1,800,000 sets.
   Combined United Kingdom and United States, 36,000 long tons of rubber in all forms, including tires and tubes, in equal monthly installments; in addition, 2,000 long tons per month from Ceylon as long as that source is open.

Item 79. – High Pressure Hose: Amount requested:
   1,000,000 meters.
SECOND PROTOCOL

Item 80. – Sheet Fiber: Amount requested:
3,600 tons.

Item 81. – Shock Absorber Cord: Amount requested:
60,000 meters.

No commitments can be made until further specifications are received.

Item 82. – Metallic Cloth and Screen
Amount requested: 1,000,000 square meters.

1,000,000 square meters in equal monthly installments, subject to copper limitations as stated in Item 6.

Item 83. – Condenser Paper (Radio)
Amount requested: 240 short tons

240 short tons in equal monthly installments.

Item 84. – Miscellaneous Emergency Material
Amount requested: $60,000,000 worth

Depends upon further specifications.

GROUP III. Equipment and Materials for Specific Industries

A. Equipment and Materials for Railroads

Under this category the U.S.S.R. have requested 21 general items and 55 specific items. With the exceptions of the items set forth below, the items requested include large amounts of critical materials and critically scarce tools, cranes and other heavy machinery. It may be possible to supply a few units of some of the items upon receipt of specifications as to sizes and types. No commitment or recommendation can be made at this time, except as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Requested</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rails</td>
<td>240,000 long tons</td>
<td>216,000 long tons</td>
</tr>
<tr>
<td>Wheels</td>
<td>36,000 sets</td>
<td>12,000 sets</td>
</tr>
<tr>
<td>Axles</td>
<td>60,000 units</td>
<td>54,000 units</td>
</tr>
</tbody>
</table>

It is believed that the foregoing can be made available in equal monthly installments at one-twelfth of the annual rate. For a list of all items see Program of Requirements submitted by the U.S.S.R.

B. Equipment and Materials for Iron and Steel Industry

Under this category the U.S.S.R. have requested 191 items for blast and open hearth furnaces, Bessemer converters, coke oven batteries, rolling mills, turbo generator units, boiler installations, and turbo blowers. The value of the requests has been estimated by the U.S.S.R. at $180,000,000 as opposed to a U.S. estimate of approximately $1,000,000,000. The requested equipment approximately duplicates that required for the American steel expansion program now under way.

Production of any substantial part of the request could not be effected without abandoning our own steel expansion program. Consequently, the requests cannot be filled. For a list of individual items see Program of Requirements submitted by the U.S.S.R.
C. Equipment for Petroleum Industry

Under this category the U.S.S.R. have requested 10,000 tons of steel pipe and 16 items of drilling equipment and fittings. Many of the items requested are critical factors in the expansion of 100 octane and synthetic rubber production in the United States. The Petroleum Coordinator recommends that the requests not be fulfilled. For a list of all items see Program of Requirements submitted by the U.S.S.R. Certain items which will not interfere with the 100 octane and synthetic rubber programs may be made available upon receipt of definite specifications. Some used refining equipment in good condition is available.

GROUP IV. Food Products

Item 1. – Wheat and Flour
Amount requested: 2,400,000 tons
2,400,000 tons in equal monthly installments.

Item 2. – Sugar
Amount requested: 840,000 tons
840,000 tons in equal monthly installments.

Item 3. – Canned Meat Products
Amount requested: 120,000 tons
120,000 tons in equal monthly installments.

Item 4. – Meat
Amount requested: 180,000 tons
180,000 tons in equal monthly installments.

Item 5. – Lard
Amount requested: 144,000 tons
144,000 tons in equal monthly installments.

Item 6. – Vegetable Oil
Amount requested: 120,000 tons
120,000 tons in equal monthly installments.

Item 7. – Soap Stock
Amount requested: 60,000 tons
60,000 tons in equal monthly installments.

GROUP V. Medical Supplies

Amount requested: $13,813,966 worth

Approximately $12,000,000 worth of medical supplies in approximately equal monthly installments and substantially in accordance with request but with the understanding that items and quantities thereof must be arranged with appropriate United States Agency.

1 At the request of Mr. W. D. Crampton, official of the Office of Petroleum Coordinator, a letter was sent to General Belyaev on Sept. 9, 1912 correcting paragraph C as follows:

"Under this category, the U.S.S.R. has requested 10,000 tons of steel pipe and 16 items of drilling equipment and fittings. We will supply you with this material upon agreement of definite specifications permitting the procurement of the material."
[GROUP VI.] Naval Stores

In addition to the above listed items requested by the Government of the U.S.S.R., the Government of the United States undertakes to make available certain diesel engines, gasoline engines, storage batteries for submarines, guns and ammunition to arm U.S.S.R. merchant vessels and mine sweepers or patrol craft.

These items can be made available at the following rates:

**Diesel Engines**

506 diesel engines, varying from 170 to 1600 horsepower in the following quantities: 122 of 170 HP; 200 of 250 HP; 48 of 600 HP; 130 of 1200 HP; 6 of 1600 HP.

These diesel engines can be made available at the following rates:

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity</th>
<th>Date</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>4</td>
<td>January, 1943</td>
<td>46</td>
</tr>
<tr>
<td>July</td>
<td>16</td>
<td>February</td>
<td>46</td>
</tr>
<tr>
<td>August</td>
<td>20</td>
<td>March</td>
<td>51</td>
</tr>
<tr>
<td>September</td>
<td>24</td>
<td>April</td>
<td>51</td>
</tr>
<tr>
<td>October</td>
<td>44</td>
<td>May</td>
<td>56</td>
</tr>
<tr>
<td>November</td>
<td>46</td>
<td>June</td>
<td>56</td>
</tr>
<tr>
<td>December</td>
<td>46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Gasoline Engines**

2,170 gasoline engines from 50 to 1200 HP in the following quantities: 1500 of 50–120 HP; 120 of 900 HP; 550 of 1200 HP.

These gasoline engines can be made available at the following rate:

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity</th>
<th>Date</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>100</td>
<td>January 1943</td>
<td>215</td>
</tr>
<tr>
<td>August</td>
<td>150</td>
<td>February</td>
<td>215</td>
</tr>
<tr>
<td>September</td>
<td>150</td>
<td>March</td>
<td>215</td>
</tr>
<tr>
<td>October</td>
<td>150</td>
<td>April</td>
<td>220</td>
</tr>
<tr>
<td>November</td>
<td>150</td>
<td>May</td>
<td>220</td>
</tr>
<tr>
<td>December</td>
<td>165</td>
<td>June</td>
<td>220</td>
</tr>
</tbody>
</table>

**Storage Batteries for Submarines**

12 storage batteries for submarines at the rate of one per month.

**Naval Armament and Ammunition**

Sufficient guns and ammunition can be made available to arm U.S.S.R. merchant vessels with one 3-inch double purpose gun and two machine guns together with ammunition, as such ships become available for arming.

**Mine Sweepers or Patrol Craft**

10 mine sweepers or patrol craft can be delivered during April, May and June, 1943.

---

[GROUP VII.] Electric Power Generating Equipment

The Government of the United States further undertakes to make available stationary and mobile power generating equipment of types to be arranged. Some used power generating equipment in good condition is available at the present time.
United Kingdom Schedule of Stores

The United Kingdom Government undertakes to make available to the Union of Soviet Socialist Republics the following schedule of stores from the period starting July 1, 1942 to June 30, 1943. For certain items the amounts to be made available are indicated as combined offerings of the United States and the United Kingdom, and appear as a combined figure in the schedules of both Governments.

A. Military Supplies

Item 1. – Aircraft
200 fighters monthly for last six months of 1942. The U. K. Government cannot at present undertake to increase the present quota of 200 aircraft a month, but the existing quota rates will be continued to the end of the year. The U. K. Government cannot foresee the situation beyond the end of 1942, and its ability to continue or increase supplies of fighters will depend upon the results of the intensified air fighting in the West of Europe during the present year.

Item 2. – Tanks
250 monthly, until December 31, 1942. It is hoped that a combined offer of 1,000 monthly can be made by a joint commitment from the U. S. and U. K. for the first 6 months of 1943. Basis of allocation to be decided at a later date.

Item 3. – Anti-Tank Guns
50 2-pdr. monthly with ammunition. 50 6-pdr. monthly with ammunition.

Item 4. – Anti-Tank Rifles
300 monthly with ammunition.

Item 5. – Bren Carriers
200 monthly with weapons.

B. Naval Supplies

Certain naval supplies have been promised since Protocol and these promises will be fulfilled. Quantities falling within period after June, 1942 until completed are:

Item 1. – Oerlikons
50 monthly with ammunition.

Item 2. – 3” HA/LA or 12-PDR. Guns With Ammunition
10 monthly until requirements are met.

Item 3. – Submarine Storage Batteries
20 to complete total of 32.

32
SECOND PROTOCOL

Item 4. – 103mm Complete Barrels
8, plus one spare barrel per gun per month starting in August.

C. Raw Materials
(Figures in long-tons monthly except where otherwise stated.)

Item 1. – Aluminum
2,000 tons monthly, July, August, September, subject to reconsideration end of September. U. S. offer of 24,000 long tons in equal monthly installments remains unchanged.

Item 2. – Tin
750 tons monthly (adjustments dependent upon decisions arrived at by the Combined Raw Materials Board, less any amounts over 9,000 received by U.S.S.R. from China.)

Item 3. – Nickel
Combined United Kingdom and United States at rate of 600 short tons per month for first 6 months; subject to review for second 6 months. This amount includes nickel in all forms to be made available, including alloys with steel, nichrome wire, and other materials, requiring nickel in the specifications, except finished munitions.

Item 4. – Lead
3,500 tons monthly dependent upon cancellation of unshipped amounts under the First Protocol and upon shipping conditions.

Item 5. – Copper
Combined United Kingdom and United States, 120,000 long tons in equal monthly installments. This includes copper in all forms, including refinery shapes, brass and wire mill products, copper base alloys and copper content of finished products other than ammunition.

Item 6. – Zinc, High Grade
Combined United Kingdom and United States 18,000 short tons in equal monthly installments.

Item 7. – Industrial Diamonds
$150,000 monthly.

Item 8. – Ferrosilicon
Combined United Kingdom and United States, 12,000 long tons in equal monthly installments.

Item 9. – Ferrochrome
Combined United Kingdom and United States, 7,200 long tons in equal monthly installments.

Item 10. – Silver Steel
50 tons per month.

Item 11. – Graphite
100 tons per month, dependent upon local conditions in Ceylon.

Item 12. – Rubber
Combined United Kingdom and United States, 36,000 long tons of rubber in all forms including tires and tubes in equal monthly installments. In addition, 2,000 long tons per month from Ceylon as long as that source is open.
Item 13. — Jute
4,000 tons per month, dependent upon Indian conditions.

Item 14. — Shellac
300 tons per month dependent upon Indian conditions.

Item 15. — Wool
2,000 tons per month from New Zealand dependent upon shipping conditions.

D. Food

The only quantities of food which it will be possible for the United Kingdom to make available to the U.S.S.R. will be food which it would be possible to use for filling capacity for bottom cargo and broken stowage in ships carrying tanks and aircraft.
Letter of Transmittal

THE WHITE HOUSE
WASHINGTON

October 2, 1942

Maj. Gen. A. I. Belyaev
Chairman, Soviet Government Purchasing Commission
Washington, D.C.

My dear General Belyaev:


This report has been agreed to by appropriate representatives of the Soviet Government and of the United States Government and therefore becomes a definite part of United States commitments under the Second Protocol.

Sincerely yours,

Harry L. Hopkins
Special Assistant to the President

Attachment

35
Conference Report

Conference Report on the Production Program for Groups II, III & VII of the Schedule of United States Stores in the Proposed Second Protocol Between the U.S.A., the U.S.S.R. and Great Britain

Pursuant to the request of the USSR Government for clarification and adjustment of several items within Groups II, III and VII of the Proposed Second Protocol, representatives of the United States Government and the Government Purchasing Commission of the Soviet Union in the U. S. A., after discussion and consideration of requisitions submitted up to August 15, 1942, reached decisions regarding the items under consideration in accordance with the attached schedule.

In general the revised offerings of the United States involve an increase in the total tonnage of the three groups here involved from approximately 2,269,000 short tons to approximately 2,830,000 short tons—an increase of some 560,000 short tons. This additional tonnage is accounted for by substantial increases in the tonnages of chemicals, industrial equipment, railroad materials, power generating equipment and petroleum refineries. In addition, while the total tonnage of the steel program now offered does not differ substantially from the total tonnage of the original offer, the composition of this program has been substantially altered in an attempt to provide the USSR with additional quantities of certain urgently required but critically scarce types of steel products.

The revised offer which is now proposed is regarded as the total production program to be undertaken by the United States for Groups II, III and VII for the USSR during the year July 1, 1942 to July 1, 1943.

WASHINGTON, D. C.
October 2, 1942

Approved for the United States Government

HARRY L. HOPKINS
Special Assistant to the President
### U. S. S. R. aid program for period July 1, 1942 to June 30, 1943

(1) Original Second Protocol Offerings, (2) Proposed Second Protocol Commitments, (3) "Debits" against Second Protocol as of August 15, 1942, and (4) "Credits" under Second Protocol as of August 15, 1942. For material, machinery and industrial equipment items (Protocol Groups II, III, and VII) 

See footnotes at end of table.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marine cable</td>
<td>2,670 (1,200 km.)</td>
<td>3,449</td>
<td>3,449</td>
<td>0</td>
<td>Commitment (Col. 2) includes 300 tons carry-over as of June 30, 1942 under special arrangement with W. F. B.</td>
</tr>
<tr>
<td>2</td>
<td>Submarine cable</td>
<td>2,700 (600 km.)</td>
<td>3,663</td>
<td>3,663</td>
<td>0</td>
<td>Commitment (Col. 2) includes 3,440 S. T. carry-over as of June 30, 1942 under special arrangement with W. F. B.</td>
</tr>
<tr>
<td>3A</td>
<td>Duraluminum</td>
<td>26,880</td>
<td>27,180</td>
<td>14,475</td>
<td>12,705</td>
<td>Nickel commitment (Col. 2) is for the six months period July-Dec. 1942 only; includes nickel in all forms except finished military stores. Pursuant to the request of the USSR, further study is being given to the possibility of increasing the supply of nickel to the USSR.</td>
</tr>
<tr>
<td>4</td>
<td>Nickel</td>
<td>6,720</td>
<td>9,510</td>
<td>9,160</td>
<td>350</td>
<td>Nickel commitment (Col. 2) is for the six months period July-Dec. 1942 only; includes nickel in all forms except finished military stores. Pursuant to the request of the USSR, further study is being given to the possibility of increasing the supply of nickel to the USSR.</td>
</tr>
<tr>
<td>5</td>
<td>Molybdenum</td>
<td>3,600</td>
<td>1,548</td>
<td>2,052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Copper electrolytic</td>
<td>4,000 (134,400)</td>
<td>4,000 (134,400)</td>
<td>3,904</td>
<td>36</td>
<td>Copper commitment (Col. 2) is for copper in all forms except finished military stores; since entire copper commitment is approximately taken up in goods containing copper, the committed tonnage is not added into totals.</td>
</tr>
<tr>
<td>7</td>
<td>Rolled copper (cartridge brass, etc.)</td>
<td>102,000</td>
<td>106,411</td>
<td>100,411</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

See footnotes at end of table.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Group II—continued</td>
<td>18,000</td>
<td>29,000</td>
<td>4,427</td>
<td>24,573</td>
<td>Zinc commitment (Col. 2) is composed of 18,000 as in Col. 1, 1,000 S. T. from U. S. Sept. 1942-June 1943, Inc., and 1,000 S. T. in Sept. 1942 from U. K. Supply of additional 9,000 tons requested by USSR, is still under study.</td>
</tr>
<tr>
<td>10</td>
<td>Bismetal</td>
<td>12,000</td>
<td>20,160</td>
<td>10,080</td>
<td>10,080</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Copper goods &amp; tubes</td>
<td>15,000</td>
<td>15,148</td>
<td>15,148</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ferrosilicon</td>
<td>13,440</td>
<td>13,440</td>
<td>9,206</td>
<td>4,234</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Ferrochrome</td>
<td>8,064</td>
<td>8,064</td>
<td>5,660</td>
<td>2,404</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Armor plate</td>
<td>13,440</td>
<td>13,440</td>
<td>14,701</td>
<td>-1,201</td>
<td>Commitment is for $32,404,000 worth of types set forth in memorandum from Soviet Government Purchasing Commission.</td>
</tr>
<tr>
<td>15</td>
<td>Hard alloys &amp; cutting tools</td>
<td>945 (89,000,000)</td>
<td>12,120</td>
<td>1,545</td>
<td>577</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Polished drill rods:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>121 Plain carbon</td>
<td>121</td>
<td>67</td>
<td>134</td>
<td>27</td>
<td>107</td>
</tr>
<tr>
<td>18</td>
<td>13 High speed</td>
<td>13</td>
<td>27</td>
<td>134</td>
<td>27</td>
<td>107</td>
</tr>
<tr>
<td>18</td>
<td>0 Alloy</td>
<td>0</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>17</td>
<td>3,360 High speed tool steel</td>
<td>3,360</td>
<td>3,360</td>
<td>1,282</td>
<td>2,078</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>3,360 Plain carbon</td>
<td>3,360</td>
<td>3,360</td>
<td>1,282</td>
<td>2,078</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1,142 Alloy—X12</td>
<td>1,142</td>
<td>1,142</td>
<td>4,886</td>
<td>6,538</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>672 Alloy—X12M</td>
<td>672</td>
<td>672</td>
<td>672</td>
<td>672</td>
<td>672</td>
</tr>
<tr>
<td>18</td>
<td>6,720 Alloy—Other</td>
<td>6,720</td>
<td>6,720</td>
<td>6,720</td>
<td>6,720</td>
<td></td>
</tr>
</tbody>
</table>

**SOVIET SUPPLY PROTOCOLS**
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Cold finished bars:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bessemer 34&quot; to 34'</td>
<td></td>
<td>36,880</td>
</tr>
<tr>
<td></td>
<td>Bessemer 34' to 3'</td>
<td></td>
<td>5,370</td>
</tr>
<tr>
<td></td>
<td>Basic O. H. high carbon (bullet bore)</td>
<td></td>
<td>80,640</td>
</tr>
<tr>
<td></td>
<td>FKS 318—revision 2</td>
<td></td>
<td>5,370</td>
</tr>
<tr>
<td></td>
<td>Electric and B. O. H. alloy</td>
<td></td>
<td>145,152</td>
</tr>
<tr>
<td></td>
<td>Other alloy O. H. steel, and 30XGCA,</td>
<td></td>
<td>116,928</td>
</tr>
<tr>
<td></td>
<td>AISI-3316, AISI-4330, ball bearing steel, etc.</td>
<td></td>
<td>174,074</td>
</tr>
<tr>
<td></td>
<td>Other cold drawn bars—SAE-1015 to 1040</td>
<td></td>
<td>-57,146</td>
</tr>
<tr>
<td>20</td>
<td>Hot rolled aircraft steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electric</td>
<td></td>
<td>36,880</td>
</tr>
<tr>
<td></td>
<td>B. O. H.</td>
<td></td>
<td>107,520</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26,880</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>107,520</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>78,463</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>29,057</td>
</tr>
<tr>
<td>21</td>
<td>CR.—8.7—MN. billets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>94,080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>113,120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100,044</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13,076</td>
</tr>
<tr>
<td>22</td>
<td>Cold rolled sheets—12 GA. and lighter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>94,080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>94,080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>38,097</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>55,683</td>
</tr>
<tr>
<td>22A</td>
<td>Cold rolled strip:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23 carbon and under</td>
<td></td>
<td>40,230</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>61,600</td>
</tr>
<tr>
<td></td>
<td>Over .25 carbon</td>
<td></td>
<td>33,760</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>94,090</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23,820</td>
</tr>
<tr>
<td></td>
<td>Other cold rolled strip</td>
<td></td>
<td>94,080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>131,325</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-37,245</td>
</tr>
<tr>
<td>23</td>
<td>Stainless steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sheets</td>
<td></td>
<td>1,344</td>
</tr>
<tr>
<td></td>
<td>Strip</td>
<td></td>
<td>3,300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2,940</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2,788</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>572</td>
</tr>
<tr>
<td></td>
<td>Tim plate</td>
<td></td>
<td>67,260</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>67,250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22,263</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>44,947</td>
</tr>
</tbody>
</table>

In accordance with the original offer of a total of 145,152 T. for Item 19, the United States will undertake to make a further study of the possibility of meeting the USSR request for 25,000 tons of material under item 19-F. In the event that the United States is unable to meet this request, it will further study the possibility of supplying an additional 25,000 tons of cold drawn steel of some other type than that indicated under item 19-F. To the extent that it is possible to meet these requests the total charges of 76,146 tons, shown in col. 4, will be correspondingly reduced.

To be composed as follows: 4,952 T. high alloy steel—Grade E1-69; 8,900 S. T. alloy—AISI-3316; 16,800 S. T. alloy—AISI-4330; 24,640 S. T. chromium molybdenum construction steel. In addition, the U.S. will further study the possibility of meeting the USSR request for an additional 25,872 T. of alloy—AISI-3316, or a suitable substitute. Includes 19,040 T. representing deficiency as of June 30, 1942, promised for delivery during July—September, 1942.

Includes 1,780 S. T. of metallic belt link strip.

See footnotes at end of table.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Steel wire:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Ball wire.</td>
<td>1,344</td>
<td>1,344</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Alloy ASTM 230</td>
<td>1,344</td>
<td>1,344</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Alloy 4140</td>
<td>1,344</td>
<td>1,344</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Music wire</td>
<td>8,064</td>
<td>11,722</td>
<td>73,999</td>
<td>57,523</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Spring wire</td>
<td>8,064</td>
<td>11,722</td>
<td>73,999</td>
<td>57,523</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Rope wire</td>
<td>6,048</td>
<td>10,640</td>
<td>62,631</td>
<td>16,476</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Card wire</td>
<td>269</td>
<td>269</td>
<td>73,999</td>
<td>57,523</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Electric welding wire</td>
<td>4,062</td>
<td>4,062</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Galv. Tel. &amp; Tel. wire</td>
<td>26,880</td>
<td>26,880</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Low carbon</td>
<td>4,764</td>
<td>4,764</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Square wire</td>
<td>269</td>
<td>269</td>
<td>73,999</td>
<td>57,523</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Tinned wire</td>
<td>269</td>
<td>269</td>
<td>73,999</td>
<td>57,523</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Wire rope:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Aircraft cord &amp; rope</td>
<td>0</td>
<td>0</td>
<td>17,248</td>
<td>19,698</td>
<td>-2,450</td>
</tr>
<tr>
<td>B</td>
<td>Other wire rope</td>
<td>16,128</td>
<td>16,128</td>
<td>17,248</td>
<td>19,698</td>
<td>-2,450</td>
</tr>
<tr>
<td>27</td>
<td>Steel alloy tubes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3% Cr-8% Ni</td>
<td>1,344</td>
<td>1,344</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>4%-5% Cr</td>
<td>8,360</td>
<td>8,360</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Carbon with 3% moly</td>
<td>13,440</td>
<td>13,440</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Pipe sizes</td>
<td>24,192</td>
<td>24,192</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Cold drawn tube</td>
<td>2,016</td>
<td>2,016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Hot finished tube</td>
<td>4,632</td>
<td>4,632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>H. R. Cr. ball bearing tube of 2&quot; to 7&quot; dia.</td>
<td>5,200</td>
<td>5,200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Stainless steel wire</td>
<td>403</td>
<td>403</td>
<td>118</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Special alloy wire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>High Ni</td>
<td>27</td>
<td>27</td>
<td>269</td>
<td>291</td>
<td>247</td>
</tr>
<tr>
<td>B</td>
<td>Other</td>
<td>242</td>
<td>242</td>
<td>269</td>
<td>291</td>
<td>247</td>
</tr>
<tr>
<td>30</td>
<td>Nickel-chrome wire</td>
<td>588</td>
<td>588</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Barbed wire</td>
<td>53,760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Barbed wire staples</td>
<td>2,688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Pipe and tubing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Welded pressure &amp; mechanical tubing</td>
<td>26,880</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Seamless pressure &amp; mech. tubing</td>
<td>20,160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Cold drawn pressure &amp; mech. tubing</td>
<td>6,720</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Hot finished pressure &amp; mech. tubing</td>
<td>13,448</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Electric weld casing</td>
<td>25,880</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Electric weld line pipe</td>
<td>53,760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Seamless casing</td>
<td>26,880</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Seamless line pipe</td>
<td>53,760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Seamless drill pipe</td>
<td>26,880</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Hot rolled:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Sheets</td>
<td>53,760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Galvanized roofing sheets</td>
<td>2,240</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Plates</td>
<td>107,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>H. R. bars &amp; bar mill shapes</td>
<td>3,920</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Structural shapes</td>
<td>13,440</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Bolts, nuts, rivets, nails &amp; chains</td>
<td>13,440</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Other metals &amp; steel products</td>
<td>2,688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Phenol</td>
<td>12,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Petroleum products</td>
<td>240,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Ethylene glycol</td>
<td>2,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Sodium bromide</td>
<td>1,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Phosphorus</td>
<td>2,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Dibutyl phthalate</td>
<td>3,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Dimethylamine</td>
<td>3,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Diphenylamine</td>
<td>1,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Colloxdyn</td>
<td>4,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Methanol</td>
<td>12,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Urotropine</td>
<td>4,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Hexagen</td>
<td>4,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Ammonia chloride</td>
<td>3,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Mercury</td>
<td>3,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Potassium nitrate</td>
<td>2,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Ammonium cyanide</td>
<td>3,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Centraite</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Resin (resorcinol)</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Barium peroxide</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>Strontium (S. nitrate)</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Rodite (rhodamine B)</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>Torium (T. nitrate)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Cerium (O. chloride)</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Cresol</td>
<td>1,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the event the USSR wishes to take additional material under Item 32-A (up to a total of 26,880 s. t.) or Item 32-D (up to a total of 13,440 s. t.), the U. S. will undertake to make this additional tonnage available upon a corresponding reduction of the tonnages to be delivered under other steel items (Items 16 to 36).

Amount requested for: $10,000,000 fulfillment depends upon specifications.

See footnotes at end of table.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP II—continued</td>
<td></td>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>61A</td>
<td>Other chemicals</td>
<td>0</td>
<td>60,000</td>
<td>18,602</td>
<td>41,398</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>62</td>
<td>Machine tools</td>
<td>126,000 ($150,000,000)</td>
<td>263,400 ($314,300,000)</td>
<td>90,983</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>63</td>
<td>Electric furnaces</td>
<td></td>
<td>6,125</td>
<td>72,963</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>64</td>
<td>Forging presses &amp; hammers</td>
<td></td>
<td>80,731</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65</td>
<td>Various industrial equipment</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The additional 60,000 S.T. of chemicals here offered under Items 36, 38 to 61A, inclusive, is designed to make allowance for the considerable volume of additional requests which the USSR will need to make. The particular chemicals and quantities to be made available within this 60,000 tons must depend upon the supply situation prevailing at the time particular requests are made. The United States will undertake to use its best efforts to secure delivery of machine tools, electric furnaces, forging presses and hammers and various industrial equipment (Items 62 to 65 inclusive) to the total value of approximately $315,000,000 representing approximately 260,000 short tons. This represents the total quantity of these items actually requisitioned by the USSR through August 15, 1942 less the quantities exported prior to June 30, 1942 and less the quantities scheduled for delivery subsequent to June 30. Of this total the United States definitely undertakes to make deliveries of equipment valued at approximately $165,000,000. With respect to the balance of $165,000,000 worth of equipment, the United States can not give definite assurance of full deliveries prior to June 30, 1943, but will use its best efforts to effect such deliveries.
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasives</td>
<td>4,500</td>
<td>($3,600,000)</td>
<td>4,500</td>
</tr>
<tr>
<td>Graphite electrodes</td>
<td>5,376</td>
<td>($3,465,000)</td>
<td>5,376</td>
</tr>
<tr>
<td>Bearings</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Balls &amp; rollers</td>
<td>150</td>
<td>(28,000,000 units)</td>
<td>150</td>
</tr>
<tr>
<td>Shoe leather</td>
<td>0</td>
<td>18,670</td>
<td>18,670</td>
</tr>
<tr>
<td>Army boots</td>
<td>4,000</td>
<td>(2,400,000 yrs.)</td>
<td>4,000</td>
</tr>
<tr>
<td>Army cloth</td>
<td>17,550</td>
<td>(18,000,000 yds.)</td>
<td>17,550</td>
</tr>
</tbody>
</table>

To the extent that the USSR has other urgent requests for fabricated equipment, such requests will be considered in the light of the current position of the United States with respect to critical materials and productive facilities and the acceptance of requisitions for any such further quantities of equipment will depend upon a corresponding reduction of similar items already under requisition.

The USSR has requested 8,500,000 bearings. The U.S. has agreed to supply bearings to the USSR to the extent of its capacity to do so. The amounts and sizes must depend upon the specific sizes required.

The United States will make available to the USSR a total of 1,867 s. t. of leather per month commencing in October or a total of 18,670 s. t. for the period July 1, 1942 to June 30, 1943 exclusive of any stocks on hand as of July 1, 1942. The composition of the 1,867 s. t. per month shall be as follows: Sole leather from the U.S., 550 s. t. made up of benders, strips, and out soles of both finders' and manufacturers' leather, 110 s. t. from Canada and 110 s. t. from Brazil; Upper leather (army retan): 480 s. t. from the U.S., 44 s. t. from Brazil and 84 s. t. from Cuba; Inner sole leather: 540 s. t. from South America. The portions of sole leather, upper leather and inner sole leather indicated above to be furnished from South American countries are dependent upon the availability of shipping from those countries and the United States' undertaking to supply is dependent upon the availability of such shipping.

See footnotes at end of table.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td><strong>GROUP II—continued</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Electric power cable</td>
<td>66,628 (12,000 km.)</td>
<td>66,628</td>
<td>13,814</td>
<td>52,814</td>
</tr>
<tr>
<td>74A</td>
<td>Miscellaneous copper cable &amp; wire</td>
<td>0</td>
<td>3,000</td>
<td>3,000</td>
<td>0</td>
</tr>
<tr>
<td>75</td>
<td>Webbing</td>
<td>0</td>
<td>3,100</td>
<td>3,100</td>
<td>0</td>
</tr>
<tr>
<td>76</td>
<td>Tarpaulin</td>
<td>3,000 (36,000,000 yds.)</td>
<td>3,000</td>
<td>3,000</td>
<td>0</td>
</tr>
<tr>
<td>77</td>
<td>Vistanex</td>
<td>0</td>
<td>0</td>
<td>44</td>
<td>-44</td>
</tr>
<tr>
<td>78</td>
<td>Tires, tubes, other rubber products</td>
<td>40,320</td>
<td>40,320</td>
<td>13,369</td>
<td>21,951</td>
</tr>
<tr>
<td>79</td>
<td>High pressure hose</td>
<td>0</td>
<td>0</td>
<td>648</td>
<td>648</td>
</tr>
<tr>
<td>80</td>
<td>Sheet fiber</td>
<td>0</td>
<td>0</td>
<td>4,361</td>
<td>4,361</td>
</tr>
<tr>
<td>81</td>
<td>Shock absorber cord</td>
<td>0</td>
<td>0</td>
<td>54</td>
<td>64</td>
</tr>
<tr>
<td>82</td>
<td>Metallic cloth and screen</td>
<td>2,000 (1,000,000 sq. in.)</td>
<td>2,000</td>
<td>122</td>
<td>1,878</td>
</tr>
<tr>
<td>83</td>
<td>Condenser paper (radio)</td>
<td>260</td>
<td>260</td>
<td>138</td>
<td>112</td>
</tr>
<tr>
<td>83A</td>
<td>Cigarette paper</td>
<td>0</td>
<td>0</td>
<td>988</td>
<td>988</td>
</tr>
<tr>
<td>83B</td>
<td>Parchment paper</td>
<td>0</td>
<td>0</td>
<td>2,090</td>
<td>2,090</td>
</tr>
<tr>
<td>84</td>
<td>Miscellaneous emergency material</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>85</td>
<td>Ferrophosphorus</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>86</td>
<td>Ferrovanadium</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>87</td>
<td>Ferrotungsten</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>89</td>
<td>Lead</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>90</td>
<td>Tin</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>91</td>
<td>Foil</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A</td>
<td>Aluminum</td>
<td>95</td>
<td>95</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>Tin</td>
<td>52</td>
<td>52</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C</td>
<td>Nickel</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>92</td>
<td>Babbitt metal</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>93</td>
<td>Cadmium</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>94</td>
<td>Cobalt</td>
<td>0</td>
<td>0</td>
<td>144</td>
<td>136</td>
</tr>
</tbody>
</table>

- None available. See letter to Belyaev, att.
- This includes rubber in all forms except finished military stores.
- No commitments. See Belyaev letter, att.
- Amount requested: $60,000,000 worth. Depends upon further specifications.
- Should be 134 short tons. See Belyaev letter 10-28-42 attached.
<table>
<thead>
<tr>
<th>GROUP III</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>101 Rails</td>
<td>241,920</td>
<td>268,916</td>
</tr>
<tr>
<td>101A Accessories</td>
<td>18,528 (12,000 sets)</td>
<td>36,656 (24,000 sets)</td>
</tr>
<tr>
<td>102 Mounted sets of wheels &amp; axles</td>
<td>60,480</td>
<td>30,663</td>
</tr>
<tr>
<td>103 Car axles</td>
<td>22,250 (2,000 units)</td>
<td>13,240</td>
</tr>
<tr>
<td>104 Locomotive &amp; car wheel tires</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>105 Locomotive &amp; car wheel axles</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>106 Engine driving wheel sets</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>107 Steel locomotive axles</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>108 Electric locomotive axles</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>109 Welding &amp; other equipment for railroads</td>
<td>0</td>
<td>2,600</td>
</tr>
<tr>
<td>110 Pneumatic tools</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>111 Signal equipment</td>
<td>0</td>
<td>52,573</td>
</tr>
<tr>
<td>112 Equipment &amp; materials for iron &amp; steel industry</td>
<td>0</td>
<td>9,877</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>2,968,858</strong></td>
<td><strong>2,820,571</strong></td>
</tr>
</tbody>
</table>

**Equipment for petroleum industry:**

| 130 Oil drilling equipment | 40,000 | 3,440 |
| 131 Refinery plants | 50,400 | 0 |

**GROUP VII**

| 140 Electric power generating equipment | 40,331 | 48,750 |

For Items 109-111, 120: The possibilities of supplying equipment and materials for the railroad industry and the iron & steel industry are currently being investigated. To the extent that it is found possible to supply any of this equipment, it will be necessary to effect a corresponding reduction in the equipment already requisitioned under Items 62-65 inclusive; in addition, the critical scarce materials such as steel, copper, nickel, etc., involved in such equipment will be chargeable against the total quantities of such materials offered under other items of the protocol.

For Items 131, 140: In accordance with the terms under which the power and the refinery programs were offered to the U. S. S. R., the tonnages of critical materials necessary for the production of this program are to be charged against the tonnages of particular materials offered elsewhere in the protocol. These materials include copper, nickel, rubber, steel, products, etc.

---

1 This table covers all items under Group II (various material, machinery, and industrial equipment), Group III (equipment and materials for specific industries), and Group VII (electric, power generating equipment).

2 Conversion of dollar values and common physical units of measure into short tons based on detailed joint studies of Soviet Government Purchasing Commission and War Production Board. Figures in parentheses alongside short ton figures in column 1 are commitments as stated in other units than short tons; they apply to proposed second protocol commitments (col. 2) verbatim or proportionately, except as otherwise indicated.

3 These proposed commitments include all "special arrangements" which have been made through September 15, 1942, e. g., for such items as aluminum, aircraft cord, shell steel, etc.

4 "Debits" include all requisitions submitted to the office of Lend-Lease Administration through August 15, 1942 (including those in the 10,000 sets sent directly to the War Department) and private purchases, except those requisitions under which delivery in the United States and export to Russia has taken place under the first protocol and except those requisitions calling for delivery after June 30, 1943.

5 This column shows the remaining credits as of August 15, 1942 under the proposed second protocol commitments, and thus represents the total amount of goods for which requisitions may be submitted after August 15, 1942 for delivery in the United States before July 1, 1943. Acceptance by the United States of requisitions for additional materials offered in lieu of materials and equipment already under requisition depends on specifications, production facilities, critical materials, and other relevant considerations even though no net change of total tonnage would result.
ANNEX II

Text of Identical Note Dated July 7, 1942, Addressed by the Ambassador of the Union of Soviet Socialist Republics (Litvinoff) in Washington to the Secretary of State of the United States (Hull) and by the Ambassador of the Union of Soviet Socialist Republics (Maisky) in London to His Majesty’s Principal Secretary of State for Foreign Affairs (Eden)

I am instructed by my Government to inform you as follows:

The Government of the Union of Soviet Socialist Republics accepts with satisfaction the Second Protocol proposed by the Governments of the United States of America and the United Kingdom, for the period of July 1, 1942 to June 30, 1943.

The Soviet Government wishes to express its hope that:

A. The monthly delivery of airplanes from the United Kingdom after the first six months of 1942, i.e. in the first half-year of 1943, if it cannot be increased then in no way will be decreased, and the delivery of airplanes from the United States after October, 1942 will be increased to the possible limit.

B. The Government of the United Kingdom will find a way to maintain the monthly deliveries of aluminum ingots fixed for July–September 1942, during the entire period of the Second Protocol and that the Government of the United Kingdom will be able to arrange for the monthly supply of cobalt metal at the rate of ten tons per month, as it was provided under the Moscow Protocol.

C. Taking into consideration the increased demand of the United States and the United Kingdom for nickel and also the acute need for this metal in the U.S.S.R., it will be possible to arrange a monthly supply of nickel at the rate of 400 tons per month, over the quantities necessary for the production of manufactured goods offered in the Second Protocol.

The Soviet Government considers that the proposed limitation of Soviet requirements to 4,400,000 net tons, shipments of which will be provided for to the U.S.S.R. northern ports and to the Persian Gulf, shall be made at the expense of flour, wheat, sugar and petroleum products. The Soviet Government trusts that the Government of the United Kingdom will provide for the delivery of different kinds of equipment, ordered up to July 1, 1942 by the Trade Delegation of the U.S.S.R. in the United Kingdom and will find the further possibility of accepting new Soviet orders for industrial equipment for delivery during the Second Protocol.
The Soviet Government takes note of the U.S. Government's statement regarding the impossibility, at the present time of satisfying the U.S.S.R. Government's request for machinery and equipment for the U.S.S.R. Iron and Steel Industry, Petroleum Industry and Railroads. At the same time, the U.S.S.R. Government expresses its hope that, in the future, the U.S. Government may find it possible to satisfy the needs of the U.S.S.R. for the above mentioned equipment.

The Soviet Government expresses its satisfaction at the statement of the Governments of the United States and the United Kingdom to the effect that they will be glad to reconsider, from time to time, the second program with the intention of finding out the possibilities of increasing the supply to the U.S.S.R. of military items and equipment which can be made available and delivered.

The Soviet Government authorizes its Purchasing Commission in Washington to adjust and clarify those items in the new Protocol which are in need of further adjustment and clarification.

It is presumed that the Second Protocol, like the Moscow Protocol, will be signed by the representatives of the three Governments concerned.

I am authorized to sign the Protocol on behalf of my Government.

My Government would like to have included in the Protocol the desiderata, expressed in paragraphs “A”, “B” and “C.”

ANNEX III

Decisions With Respect to the Soviet Government's Request for Supplies of Aircraft, Aluminum, Cobalt and Nickel Beyond Those Provided in the Proposed Second Protocol

1) The Government of the United Kingdom will before termination of their present commitment give further consideration to the question of continuing or increasing supplies of aircraft after the end of 1942. They can at present give no undertaking in the matter. The Government of the United States is earnestly examining the request of the Soviet Government and will reach a decision as promptly as possible in consultation with representatives of the Union of Soviet Socialist Republics.

2) The Government of the United Kingdom agree to continue to supply aluminum at the approximate monthly rate of 2,000 tons until the end of 1942.
3) The Government of the United States undertakes to make available ten tons of cobalt per month during the period covered by the Second Protocol.

4) The Government of the United States and the Government of the United Kingdom agree to increase the amount of nickel to be provided to the Union of Soviet Socialist Republics in all forms, except finished military stores, to 700 short tons per month for the fourth quarter of 1942.
LONDON PROTOCOL

Third Protocol

July 1, 1943 to June 30, 1944
THIRD PROTOCOL

The Government of the United States, the Government of the United Kingdom and the Government of Canada, recognising the outstanding contribution of the Union of Soviet Socialist Republics in the prosecution of the war against the common enemy, and desiring to continue to provide the Government of the Union of Soviet Socialist Republics with the maximum assistance possible in the form of military supplies, raw materials, industrial equipment and food, and the Government of the Union of Soviet Socialist Republics desiring to assist the Governments of the United States, the United Kingdom and Canada in meeting their war needs for raw materials and other supplies, have agreed as follows:

ARTICLE I.

The Governments of the United States, the United Kingdom and Canada, undertake to make available for dispatch to the Government of the Union of Soviet Socialist Republics, during the period the 1st July, 1943, to the 30th June, 1944, the supplies mentioned in the schedules annexed hereto under the conditions stated therein.

ARTICLE II.

The Governments of the United States and the United Kingdom will aid in the movement of the supplies offered, by furnishing shipping as set forth in the schedules annexed hereto, it being understood that these commitments as to shipping may be reduced if shipping losses, lack of escorts, deficiencies in the anticipated capacity of the available routes, the necessities of other operations, or the exigencies of the situation render their fulfilment impracticable.

ARTICLE III.

The Government of the Union of Soviet Socialist Republics undertakes to make available for dispatch to the Governments of the United States, the United Kingdom, and Canada, within the period covered by the present protocol, such raw materials and other supplies as may be available and as are desired by the said Governments in the prosecution of the war.
The financial arrangements concluded between the Government of the Union of Soviet Socialist Republics on the one hand and the Governments of the United States and the United Kingdom, respectively, on the other in connexion with the supplies furnished in pursuance of the protocol signed between the parties in Washington on the 6th October, 1942, shall continue to govern the provision of supplies furnished by the Governments of the United States and the United Kingdom in pursuance of the present protocol.

Any financial arrangements between the Government of the Union of Soviet Socialist Republics on the one hand and the Government of Canada on the other in connexion with the supplies to be furnished by the Government of Canada in pursuance of the present protocol shall be the subject of a separate agreement to be concluded between the Government of Canada and the Government of the Union of Soviet Socialist Republics.

The list of supplies in the schedules annexed hereto shall be subject to reallocation between the three supplying countries as they may decide between themselves in order to meet strategic, supply, or shipping exigencies. They shall, too, be liable to variation to meet unforeseen developments in the war situation. If shipping losses, production failures, or the necessities of other operations render their fulfilment prohibitive, it may be necessary to reduce them. On the other hand, if conditions permit, the Governments of the United States, the United Kingdom and Canada, will be glad to review the schedules from time to time for the purpose of increasing the quantities to be provided and delivered.

In witness whereof the undersigned, duly authorised by their respective Governments, have signed the present Protocol.

Done in London in quadruplicate on the 19th day of October, 1943, in the English language.

For the Government of the United States of America:
   JOHN G. WINANT.

For the Government of Great Britain and Northern Ireland:
   OLIVER LYTTELTON.
   ALEXANDER CADOGAN.

For the Government of Canada:
   VINCENT MASSEY

For the Government of the Union of Soviet Socialist Republics:
   F. GOUSEV
   D. BORISENKO
United States Schedule of Supplies and Shipments for the Third Soviet Protocol.

The United States Government undertakes to make available for shipment during the protocol period to the Union of Soviet Socialist Republics a total of 5,100,000 short tons of stores, of which approximately 2,700,000 short tons will be for shipment in Soviet flag vessels and 2,400,000 short tons for shipment in United States flag vessels. The foregoing availability will be reduced to the extent that offerings of other parties to the protocol are carried in the shipping referred to hereinafter.

The United States will supply the shipping tonnage which, with the Soviet tonnage presently employed, will lift 225,000 short tons per month via the Pacific route, on the understanding that the turn-around is to be of 90 days’ duration and that the United States will lend every assistance to the Union of Soviet Socialist Republics in order that this may be achieved, and on the further understanding that, should any untoward events close the Pacific route to the Union of Soviet Socialist Republics or restrict its use, United States tonnage transferred to the Soviet flag for employment on this route will be used on other available routes to the Union of Soviet Socialist Republics for lifting protocol supplies, for the shipment of which the United States is responsible.

The United States will undertake to lift by either the Northern route or the Persian Gulf route, whichever in the light of changing conditions proves from time to time to be more efficient, a total of 200,000 short tons a month, providing such capacity proves to be available to the United States. Furthermore, if future conditions permit, the United States agrees to increase this amount as the over-all circumstances justify.

The foregoing commitments as to shipping will include the movement of supplies selected from Canadian offerings and from United Kingdom offerings of wool and lead originating in Australia and New Zealand, and such supplies originating in North America, as, by agreement between the Governments of the United States and United Kingdom, are to continue to be carried in United States vessels, as well as shipments from such sources as may become necessary in meeting the commitments of the United States. All shipping commitments are subject to the provisions of Article II of this protocol.
The Government of the United States offers the following schedule of supplies, aggregating some 7,080,000 short tons, from which it will be necessary for the Soviet Government to select, as promptly as practicable, a program of particular supplies for dispatch which does not exceed the shipping limitations outlined above, i.e., 5,100,000 short tons, exclusive of fly-away airplanes, to which may be added 500,000 short tons for stockpile and carryover, or a total of 5,600,000 short tons. This program should include all cargo to be transported in the shipping referred to above from the United States, or from other sources, after the 1st July, 1943, including protocol and non-protocol items on hand, on order or to be ordered. Protocol and non-protocol material delivered but not exported as of the 30th June, 1943, will be available for selection within the limitations as to tonnage.

In the execution of the program of supplies listed in the attached schedule, the Government of the United States will be guided by the selections of the Government of the Union of Soviet Socialist Republics as described in the document dated the 1st September, 1943, annexed to this preamble.

It is appreciated that reasonable stockpiles of stores must be maintained in the United States so that the Union of Soviet Socialist Republics can, from month to month, select cargo for shipment that is most needed to meet the ever-changing requirements of war. However, the United States reserves the right to limit the size of such individual stockpiles, either by control of production or diversion of product, or both, when in its judgment such action is in the best interest of the common cause. In taking such action, due consideration will be given to the expressed needs of the Union of Soviet Socialist Republics.

When production is curtailed or material is diverted, the arrearages in the various items involved will be given all possible consideration in conformity with future realistic shipping programs, Soviet desires, other urgent war requirements and reasonable production schedules.

The offerings made in the United States schedule of supplies are subject to specifications which shall be in accord with current United States' conservation and production practices and practicable and specific material scheduling.

The United States stands ready, through appropriate officials, to discuss with Soviet representatives in Washington all detailed questions pertaining to the schedule of stores and services and any reasonable adjustments that may be desired.

Above all, the United States desires again to assure the Union of Soviet Socialist Republics that it has a full understanding of the vital importance of the Soviet front and the urgent necessities of moving
supplies to it in the highest possible volume and in the shortest space of time.

It is desired to emphasize that the Government of the United States is not only willing but is very anxious to render the assistance outlined. The Soviet Government may rest assured that the provisions described in Articles II and V of this protocol will not be invoked by the Government of the United States unless developments definitely require it.

Annex to Preamble: United States Schedule of Supplies and Shipments.

Memorandum.

Below is the answer of the Soviet Government to the proposals made by the Government of the United States regarding the Third Protocol:

"In view of the fact that the United States Government does not agree to make available shipping space trading under the United States flag in excess of 2,400,000 short tons for United States shipment to the Soviet Union under the Third Protocol through the Atlantic Ocean, the Soviet Government, with the purpose of reconciling the amount of deliveries with available shipping facilities, agrees to decrease the program of supplies under the Third Protocol proposed by the United States Government from 7,080,000 tons to 5,600,000 tons, including 500,000 tons of stocks and carry-overs, by decreasing the quantities of the following items (in short tons):—

(a) Wheat and flour, 700,000 tons (including deliveries from Canada) instead of 1,680,000 tons.
(b) Concentrated foods, 177,000 tons instead of 252,000 tons.
(c) Ferrous metals, 500,000 tons instead of 710,000 tons.
(d) Petroleum products, 360,000 tons instead of 565,000 tons.
(e) Various chemicals, 9,200 tons instead of 18,800 tons.

At the same time the Soviet Government agrees to the above-mentioned decrease in the deliveries of the petroleum products on the provision that the Government of Great Britain will continue deliveries of aviation gasoline to the U.S.S.R. from Persia at the rate of 10,000 tons per month during the Third Protocol period, and the United States Government will replace these deliveries to England out of its own supplies without decreasing the above-mentioned amount of petroleum product deliveries to the U.S.S.R. from the United States of America.

The Government of the U.S.S.R., agreeing to decrease the program of deliveries under the Third Protocol, is relying upon the assurance of the United States Government that the United States agrees to in-
crease the afore-mentioned amount of deliveries if conditions permit and circumstances justify it in future."

EMBASSY OF THE UNION OF SOVIET SOCIALIST REPUBLICS,
Washington, 1st September, 1943.

Armament and Military Equipment.

(All Weights in Short Tons.)

(Except as otherwise specified, amounts are to be provided in equal monthly instalments as nearly as practicable. The amounts offered below indicate all quantities to be made available during the Third Protocol period in addition to those quantities made available but unshipped on the 30th June, 1943.)

Airplanes.
Requested: 8,100.

Airplanes:
6,000 pursuit planes, "Aircobra."
1,200 light bombers, Type A-20.
600 medium bombers, Type B-25.
360 transport planes, Type C-46; C-47.

Spare Parts:
Spare engines { 30 percent of number of planes (for two-motor planes—
Spare propellers { 30 percent per motor or 60 percent per two-motor
plane).
Airplane spare parts: 20 percent of value of plane.
Engine spare parts: 15 percent of value of plane.
Propeller spare parts: 15 percent of value of propeller.

Offered: 3,462. (Supplied with equipment and ammunition in accordance with United States standards.)

Airplanes:
1,200 fighters, 1-engine, Type P-39.
600 fighters, 1-engine, Type P-40 N in first six months.
1,200 light bombers, Type A-20.
222 medium bombers, Type B-25.
150 in first six months.
72 in second six months.
240 medium transport planes, Type C-47.

The schedule of supply of aircraft during the second half of the Protocol Period will be reviewed in November, 1943.

In addition, in accordance with a previous agreement made with the United Kingdom, involving interchange of certain airplanes, the United States is to supply for the United Kingdom's account 150 P-39 or P-63 fighter airplanes per month.

Spare Parts:
To be supplied in accordance with United States standards which are equal to or in excess of amount requested. (Joint Aircraft Committee Case 1850, Revision B.)
Tanks.

Requested: None.
Offered: 2,000 medium tanks, M4A2, with ammunition and spare parts. Also 1,000 additional tanks to be placed in production for delivery the 1st July, 1944, to the 31st December, 1944.

Trucks.

Requested: 144,000.
Spare parts, 20 percent of value of trucks.
Offered: 132,000.
Delivery:
10,000 for each of first six months.
12,000 for each of second six months.
Trucks to be supplied with spare parts according to United States standards, which are in excess of amount requested.

Scout Cars (Jeeps).

Requested: 24,000.
Spare parts at 20 percent of value of a jeep.
Offered: 24,000 3/4-ton 4 x 4 trucks.
Spare parts according to United States Standards, which are in excess of amount requested.

Prime Movers for Artillery.

Requested: 3,000.
1,680 tractors, medium.
720 tractors, heavy.
600 armoured half-tracks.
Spare parts, 20 percent of value of item.
Offered: 3,000.
1,680 tractors, medium M1.
720 tractors, heavy M1.
600 cars half-track M9. (Supplied with equipment and ammunition in accordance with United States Standards.)
Spare parts in accordance with United States Standards, which are in excess of amount requested.

Motorcycles.

Requested: 12,000.
Spare parts, 20 percent of value of motorcycle.
Offered: 12,000.
Spare parts in accordance with United States Standards, which are in excess of amount requested.

Powder.

Requested: 67,200 tons.
Offered: 72,700 tons.
Delivery:
5,600 tons in first month.
6,100 tons in each of remaining months.
Toluol.

Requested: 40,320 tons.
Offered: 40,320 tons.

Delivery:
6,720 tons in first quarter.
11,200 tons in each of last three quarters.

T. N. T.

Requested: 26,880 tons.
Offered: 26,880 tons.

Radio Stations, Radio Locators.

Requested: 15,700 units and other radio equipment.
Offered: 14,010 units and other radio equipment.

In addition, 430 units estimated to be undelivered on the 30th June, 1943, under Second Protocol.

Breakdown.

A.—Radio Stations, Output more than 1 kw.

Requested: 60.
Offered: 61.

Delivery:
1—50-kw. short-wave station in last quarter.
20—10 to 15 kw. transmitting and receiving sets.
10 in each of last 2 quarters.
39—2 to 3 kw. transmitting and receiving sets.
9 in second quarter.
15 in each of last two quarters.
1—RCA FT4331 in second quarter.

B.—Radio Stations, Output less than 1 kw.

Requested: 12,000.
Offered: 11,800.

Delivery:
1,000—SCR-299:
350 in first 6 months.
650 in second 6 months.
4,500—SCR-284:
2,300—set 19 British in first 6 months.
4,000—Pilot V-100:
3,000 in first 6 months.
1,000 in second 6 months.

Within the total offering of 11,800, the U.S.S.R. may select the whole or part of the following items as substitutes for those listed above:—

95 SCR-177B:

Delivery:
40 in first quarter.
55 in second quarter.

560 SCR-274:

Delivery:
400 in first quarter.
160 in second quarter.
400 SCR–511:
Delivery:
   150 in first quarter.
   250 in second quarter.

4,800 SCR–610:
Delivery:
   2,400 in each of first two quarters.

C.—Radio Receivers.
Requested: 2,000.
Offered: 2,000.
Delivery:
   500 in second quarter.
   750 in each of last two quarters.
Additional items offered estimated to be undelivered on the 30th June, 1943, under Second Protocol: 430.
Delivery:
   20 Hallicrafter in second quarter.
   10 RME–43 receivers in second quarter.
   200 Bendix transmitters 2A–12B in first quarter.
   200 Bendix receivers in third quarter.

D.—Aircraft Radio Locators.
Requested: 500.
Offered: (Under consideration).

E.—Ground Radio Locators.
Requested: 240.
Offered: (Under consideration).

F.—Radio Altimeters.
Requested: 500.
Offered: (Under consideration).

G.—Radio Beacons.
Requested: 250.
Offered: (Under consideration).

Requested: 150.
Offered: 150 SCR–551.
Delivery:
   50 in each of last three quarters.

I.—Radio Tubes.
Requested: 2,400,000.
Offered: 2,400,000.
Delivery:
   450,000 Metal Tubes in each of first two quarters.
   475,000 Metal Tubes in each of second two quarters.
   187,500 Glass Tubes in each quarter.

Requested: $3,000,000.
Offered: $3,000,000.
Field Telephones.
Requested: 100,000 Units.
Offered: 100,000 Units EE–8A.

Teletype Apparatus.
Requested: 500 Units.
Offered: None.

Field Telephone and Telegraph Cables.
Requested: 186,000 miles.
Offered: 186,000 miles (Field Telephone wire, type 110–B).
Delivery:
75,000 miles in each of first two quarters.
18,000 miles in each of second two quarters.

Field Battery Charging Stations.
Requested: 4,000 Units.
Offered: 4,000 1¾-kw. stations.
Delivery:
1,500 in each of first two quarters.
500 in each of second two quarters.

Submarine Cable.
Requested: 1,500 km.
Offered: 600 km.

Marine Cable.
Requested: 1,200 km.
Offered: 1,200 km.

Sole Leather.
Requested: 20,160 tons.
Offered: 18,000 tons.

Army Boots.
Requested: 3,600,000 pairs.
Offered: 3,600,000 pairs.

Woollen Cloth.
Requested: 18,000,000 yards.
Offered: 18,000,000 yards.

Cotton Cloth.
Requested: 25,000,000 yards.
Offered: 25,000,000 yards.
Additional offer of 1,045,000 yards estimated to be undelivered on the 30th June, 1943, under Second Protocol.

Tarpauline.
Requested: 3,000,000 yards.
Offered: 3,000,000 yards.

Webbing.
Requested: 6,000,000 yards.
Offered: 6,000,000 yards.
Additional offer of 6,000,000 yards estimated to be undelivered on the 30th June, 1943, under Second Protocol.
Medical Supplies.
Requested: $12,000,000.
Offered: $12,000,000.

Locomotives and Flat Cars.
Requested: 2,000 to 3,000.
Offered: 500 Minimum.
(Up to 700, if possible.)
Delivery:
To begin in third quarter.

Railroad Flat Cars.
Requested: 10,000.
Offered: 10,000.
Delivery:
2,400 in second quarter.
3,800 in each of last two quarters.

Naval Stores.
(Except as otherwise specified, amounts are to be provided in equal monthly installments as nearly as practicable.)
(Quantities offered are in addition to prior protocol commitments to U.S.S.R. undelivered on the 30th June, 1943. See page 14.)

Minesweepers.
Requested: 22.
Offered: None.
(See additional offers below.)

Submarine Chasers (110 feet).
Requested: 12.
Offered: None.
(12 are being produced on non-protocol Soviet Requisition, with delivery scheduled for the last quarter of 1943.)

Sea-Going Tugs.
Requested: 20.
Offered: None.
(15 are being produced on non-protocol Soviet Requisition for export after 30th June, 1943.)

5"/38 Caliber Double Purpose Deck Guns.
Requested: 110.
Offered: None.
(It is estimated that 65 of 150 being produced under non-protocol Soviet Requisition will remain undelivered on 30th June, 1943.)

3"/50 Caliber Double Purpose Deck Guns.
Requested: 200.
Offered: 200.
Delivery second 6 months.
20-mm Oerlikon Guns.
Requested: 500.
Offered: 500.
Delivery in second 6 months.

50 Caliber Twin Machine Guns.
Requested: 900.
Offered: 900, together with ammunition according to United States standards.
Delivery:
150 in each of first 2 quarters.
300 in each of last 2 quarters.

5''/38 Caliber Ammunition.
Requested: 61,600 Rds.
Offered: None.
(Ammunition is being furnished for 150 guns being produced under non-protocol Soviet Requisition.)

3''/50 Caliber Ammunition.
Requested: 199,000 Rds.
Offered: 199,000 Rds.

20-mm. Ammunition.
Requested: 2,500,000 Rds.
Offered: 2,500,000 Rds.

Marine Engines and Generators.
Requested: 2,562.
Offered: 606.
(See additional offers below.)

Breakdown.
A.—Marine Diesel Engines 1,600 h. p.
Requested: 12 Units.
Offered: 6 Units.
(4 are to be produced on non-protocol Soviet Requisition for export after 30th June, 1943.)

B.—Marine Diesel Engines 1,200 h. p.
Requested: 100 Units.
Offered: 50 Units.
Delivery in second 6 months.

C.—Marine Diesel Engines 30–100 h. p.
Requested: 350 Units.
Offered: 200 Units.
Delivery in second 6 months.
(500 are to be produced on non-protocol Soviet Requisition for export after 30th June, 1943.)
(See additional offers below.)

D.—“Packard” Gas Engines 1,200 h. p.
Requested: 400 Units.
Offered: None.
(500 are to be produced on non-protocol Soviet Requisition for export after the 30th June, 1943.)
E.—Marine Wooden Gas Engines 30–50 h. p., Complete With Gas Products.
   Requested: 800 sets.
   Offered: None.
   (Experimental model being produced under non-protocol Soviet Requisi-
   tion.)

F.—Diesel Generators and Diesel Generator Compressors from 9 to 120 kw.
   Requested: 600 Units.
   Offered: 50 Units.
   (Maximum of 15 to be over 100 kw. Capacity.)
   (200 are to be produced on non-protocol Soviet Requisition for export
    after the 30th June, 1943.)
   (See additional offers below.)

G.—Generators—1.5 to 4 kw., Diesel or Gasoline.
   Requested: 300 Units.
   Offered: 300 Units (Gasoline) (Commercial types).

Salvage Equipment.
   Requested: 3,071 Units.
   Offered: 805 Units.
   (See additional offers below.)

Breakdown.
A.—Salvage Stations.
   Requested: 256 Units.
   Offered: 40 Units.
   (Depth not exceeding 200 feet; re-compression chambers excluded.)
   Delivery, second 6 months.
   (43 are to be produced on non-protocol Soviet Requisition for export
    after 30th June, 1943.)

B.—Portable Air Compressors, Complete With Engines.
   Requested: 180 Units.
   Offered: 60 Units.
   Delivery, 10 each month in second 6 months.

C.—Pontoons (Capacity 5 to 200 Tons).
   Requested: 600.
   Offered: None.
   (Construction in U.S.S.R. recommended because of difficulties of export
    due to size and weight.)

D.—Portable Water Pumps, Complete With Engines.
   Requested: 1,000 Units.
   Offered: 425 Units.
   (3 to 10-inch pumps.)
   Delivery in second 6 months.

E.—Underwater Electric Water Pumps.
   Requested: 100 Units.
   Offered: 100 Units.
   (Capacity not to exceed 200 G.P.M.)
   Delivery in May and June 1944.
F.—Electric Welding and Cutting Apparatus.
Requested: 120 Sets.
Offered: 60 Sets.
Delivery, 10 Sets each month in second 6 months.

G.—Electric and Pneumatic Underwater Tools.
Requested: 400 Sets.
Offered: 60 Sets.
(Pneumatic.)
Delivery, 10 Sets each month in second 6 months.

H.—Portable Electric Stations Underwater Lighting.
Requested: 240 Sets.
Offered: 60 Sets.
(5 kw. Generator and 5 Underwater Lights.)
Delivery, 10 Sets each month in second 6 months.

I.—Gas Cutting Apparatus.
Requested: 120.
Offered: None.
(Same as item F above.)

J.—Metal Detectors.
Requested: 55.
Offered: None.

Schooners, Barges for Oil and Dry Cargo, and Tugs.
Requested: 180.
Offered: None.

Breakdown.

A. For Caspian Sea (To be delivered in fabricated state for assembly on the coast of the Caspian Sea).
1. Steel seagoing standard tugs, with draft 10-11 feet, power capacity 900-1,000 H.P.
   Requested: 7.
   Offered: None.
2. Steel self-propelled seagoing standard barges for oil, with draft not exceeding 12 feet, total cargo capacity 42,000 tons, cargo capacity of about 1,900 tons each.
   Requested: 22.
   Offered: None.
3. Steel seagoing standard barges for dry cargo, with draft not exceeding 11 feet, total cargo capacity of 38,000 tons, cargo capacity of about 1,900 tons each.
   Requested: 20.
   Offered: None.

B. For Far East (To be delivered fully assembled).
1. Steel seagoing standard tugs, with draft 15-16 feet, power capacity 900-1,000 H.P.
   Requested: 3.
   Offered: None.
2. Steel self-propelled seagoing standard barges for oil, with draft 15–16 feet, total cargo capacity of 6,000 tons.
   Requested: 3.
   Offered: None.

3. Steel self-propelled seagoing standard barges for dry cargo, with draft 15–16 feet, total cargo capacity of 10,000 tons.
   Requested: 5.
   Offered: None.

4. Wooden self-propelled seagoing standard schooners for dry cargo, with draft 15–16 feet, total cargo capacity of 120,000 tons, cargo capacity of about 1,000 tons each.
   Requested: 120.
   Offered: None.

**Electrical Equipment.**

Requested: 1,965 Units and other electrical material.
Offered: 1,040 Units and other electrical material.

**Breakdown.**

**A.— Generators With Controllers, 1.5 to 25 kw.**

Requested: 500.
Offered: 295.

(Not more than 20 per cent. to be of greater capacity than 15 kw.)

**B.— Generators with Controllers, 25 to 100 kw.**

Requested: 250.
Offered: 100.

(Not more than 25 per cent. to be of 75 kw. capacity or greater.)

**C.—Motor Generators with Controllers, 1 to 10 kw.**

Requested: 100.
Offered: 100.

**D.—Motor Generators with Controllers, 10 to 75 kw.**

Requested: 25.
Offered: 25.

(Not more than 10 units to be of 50 kw. capacity or greater.)

**E.—Electric Motor with Controllers, 5 to 25 h.p.**

Requested: 1,000.
Offered: 500.

(Not more than 20 per cent. to be of 15 h.p. capacity or greater.)

**F.—Electric Motors with Controllers, 25 to 100 h.p.**

Requested: 25.
Offered: 20.

(Not more than 25 per cent. to be of 75 h.p. or greater.)

**G.—Storage Batteries for Submarines.**

Requested: 65.
Offered: 0.

(See additional offers below.)
(In addition 65 are to be produced on non-protocol Soviet Requisition)

**H.—Electric Instruments and Fixtures.**

Requested: $1,000,000.
Offered: $100,000.
Additional Offer of Estimated Undelivered Balances as of 30th June, 1943, in Second Protocol.

(Offerings to be reduced by the amounts that are made available prior to 30th June, 1943.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Minesweepers</td>
<td>10</td>
</tr>
<tr>
<td>2. Marine Diesel Engines and Spares (170–1,100 h. p.)</td>
<td>254</td>
</tr>
<tr>
<td>3. Marine Diesel Engines and Spares (30–100 h. p.)</td>
<td>263</td>
</tr>
<tr>
<td>4. Marine Diesel Generators (25–300 kw.)</td>
<td>800</td>
</tr>
<tr>
<td>5. Marine Gasoline Engines and Spares</td>
<td>90</td>
</tr>
<tr>
<td>6. Marine Pumps and Spares (95–230 V)</td>
<td>257</td>
</tr>
<tr>
<td>7. Electric Motors and Spares (110–220 V)</td>
<td>1,210</td>
</tr>
<tr>
<td>8. Turbo Generators (230 V)</td>
<td>10</td>
</tr>
<tr>
<td>9. Storage Batteries for Submarines</td>
<td>15</td>
</tr>
<tr>
<td>10. Electric Ventilating Sets</td>
<td>649</td>
</tr>
<tr>
<td>11. Scripps Engines</td>
<td>66</td>
</tr>
<tr>
<td>12. Air Tanks</td>
<td>15</td>
</tr>
<tr>
<td>13. Rotary and Change-over Switches</td>
<td>3,000</td>
</tr>
<tr>
<td>14. Potassium Tetraoxide</td>
<td>41, 100 lbs.</td>
</tr>
<tr>
<td>15. Turbo Ventilators for Engine Room</td>
<td>8</td>
</tr>
<tr>
<td>16. Windlasses with motors</td>
<td>5</td>
</tr>
<tr>
<td>17. Auxiliary Equipment for Ships</td>
<td>10</td>
</tr>
<tr>
<td>18. Vertical Steam Boiler</td>
<td>10</td>
</tr>
<tr>
<td>19. Watertight Junction Boxes</td>
<td>240</td>
</tr>
<tr>
<td>20. Jetting Equipment for Salvage Operations</td>
<td>20</td>
</tr>
<tr>
<td>21. Submarine Rescue Chamber</td>
<td>1</td>
</tr>
<tr>
<td>22. Towing Winches (220 V)</td>
<td>10</td>
</tr>
</tbody>
</table>

Shipping Weight of Non-Protocol Items Being Procured on Soviet Requisitions.

(All Weights in Short Tons)

Miscellaneous Naval Stores. Shipping Weight: 17,100.

Metals, Chemicals and Other Products.

(All Weights in Short Tons.)

(Except as otherwise specified, amounts to be provided in equal monthly installments as nearly as practicable.)

(The amounts offered below include quantities to be delivered during the Third Protocol period against new orders and old orders undelivered on 30th June, 1943.)

Duraluminum and Aluminum Ingots.

Requested: 80,640 tons.

Offered: 35,760 tons.

18,000 tons to be supplied by other parties to the Protocol.

Subject to revision upwards as circumstances permit.

Magnesium Metal.

Requested: 4,032 tons.

Offered: 4,032 tons.
Nickel.
 Requested: 9,408 tons.
 Offered: 6,600 tons.
 3,600 tons in pig nickel.
 600 tons in monel scrap.
 2,400 tons maximum contained in steel and various non-ferrous products.
 1,800 tons in pig nickel to be supplied by other parties to the Protocol.

Molybdenum Concentrates.
 Requested: 4,480 tons.
 Offered: 4,000 tons.

Copper Electrolytic.
 Requested: 134,400 tons.
 Offered: 134,400 tons maximum.
 
<table>
<thead>
<tr>
<th>Tons, Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper in copper base alloys</td>
</tr>
<tr>
<td>Copper in copper brass mill products</td>
</tr>
<tr>
<td>Copper in copper cable and wire</td>
</tr>
<tr>
<td>Copper in submarine cable</td>
</tr>
<tr>
<td>Copper in power and related cable</td>
</tr>
<tr>
<td>Copper in marine cable</td>
</tr>
</tbody>
</table>

Zinc (Slabs).
 Requested: 13,440 tons.
 Offered: 13,440 tons.

Cobalt.
 Requested: 161 tons.
 Offered: 80.5 tons.
 To be provided in first 6 months.
 Other parties to the Protocol will supply the balance of the request.

Cadmium.
 Requested: 224 tons.
 Offered: To be supplied by other parties to the Protocol.

Copper Base Alloys (Brass and Bronze).
 Requested: 107,520 tons.
 Offered: 107,520 tons.

Copper Goods and Tubes (Copper brass mill).
 Requested: 16,128 tons.
 Offered: 15,000 tons.

Copper Cable and Wire.
 Requested: 33,600 tons (Uninsulated copper wire).
 Offered: 20,000 tons.

Ferro-Alloys.
 Requested: 21,504 tons.
 Offered: 14,784 tons.
 Ferrosilicon 9,408 tons.
 Ferrochrome 5,376 tons.
 Other parties to the Protocol will supply the balance of the request. United States supplies to include existing stocks available but unshipped on the 30th June, 1943.
Nichrome Wire.
Request: 538 tons.
Offered: 538 tons.

Special Alloys Wire.
Request: 269 tons.
Offered: 269 tons.
(Other than steel and alloys.)
(Subject to specifications as to types, quantities and delivery schedules.)

Steel and Steel Products.
Request: 849,730 tons.
Offered: 1710,000 tons.

Breakdown.
A.—Carbon Steel.
Request: 735,127 tons.
Offered: 595,397 tons.
470,270 tons, including rails and accessories and Arctic and fishing programs.
(Subject to the condition that present steel stocks held on
U.S.S.R. account in the United States will be reduced to
250,000 tons and subject to the further condition that adequate
production facilities are available.)
11,120 tons copper clad strip.
6,807 tons plain carbon tool steel and drill rod.
11,200 tons bullet core, plain carbon.
60,000 tons tin plate.
36,000 tons miscellaneous carbon steel, including rails, bolts, nuts
and rivets.

B.—Alloy Steel.
Request: 114,603 tons.
Offered: 114,603 tons.
141 tons drill rods.
96 tons high speed.
45 tons alloy.
10,674 tons tool steel.
4,480 tons high speed.
672 tons alloy X12.
672 tons alloy X12M.
3,382 tons other alloys.
1,468 tons die blocks.
10,898 tons cold drawn alloy bars.
1,120 tons steel, grade 40XC.
1,120 tons steel, grade 20X3.
1,008 tons steel, grade 4134.
560 tons steel, grade 27CG.
1,680 tons steel, grade SAE5140.
930 tons steel, grade SAE4140.
4,480 tons steel, grade SAE52100.

1 Plus undelivered balances as of 30th June, 1943, of stainless tubing and hot rolled ball bearing tubing.
67,569 tons hot rolled aircraft bars.
   515 tons steel, grade EJ160.
   1,344 tons steel, grade EJ161.
   2,688 tons steel, grade 30CX10MA.
   11,200 tons steel, grade 52100.
   3,360 tons steel, grade SAE9260.
   5,600 tons steel, grade 40XC.
   8,960 tons steel, grade SAE5140.
   8,960 tons steel, grade 20X3.
   15,680 tons steel, grade 38XMJUA.
   302 tons steel, grade CXB.
   3,360 tons steel, grade EJ69 or SAE5700.
   5,600 tons steel, grade SAE5130.

2,671 tons stainless sheets.
   336 tons stainless strip.
   756 tons stainless bars.

6,563 tons ball wire.
   470 tons steel, grade BBX6.
   370 tons steel, grade BBX9.
   504 tons steel, grade BBX15.
   1,344 tons chrome vanadium wire (ASTM232).
   1,344 tons chrome moly wire (SAE4140).
   1,747 tons stainless wire.
   748 tons alloy wire (silicon manganese).

14,995 tons tubing.
   2 994 tons stainless tubing.
   8,625 tons 4–6 per cent. chrome tubing.
   2 5,376 tons hot rolled ball bearing tubing.

Other Materials, Including Steel Chains, Anchors, Screws, Other Metals and Their Products, and Nitrocellulose Base.

Requested: $10,000,000.
Offered: $5,000,000. (Subject to specifications as to types, quantities and delivery schedules.) (Subject to revision upwards if circumstances permit.)

Petroleum Products.

Requested: 564,480 tons.
(120,000 tons of which to be delivered from United Kingdom stocks in Iran and to be replaced to United Kingdom by United States.)
Offered: 564,480 tons.
(120,000 tons of which to be delivered for United States account from United Kingdom stocks at Abadan and to be replaced to United Kingdom by United States.)
(Dependent upon ability to provide type of product requested.)

Phenol.

Requested: 13,440 tons.
Offered: 12,000 tons.

1 Plus undelivered balances as of 30th June, 1943, of stainless tubing and hot rolled ball bearing tubing.
Ethylene Glycol.
   Requested: 3,360 tons.
   Offered: 3,360 tons.

Methanol.
   Requested: 6,720 tons.
   Offered: 6,720 tons.

Urotropine.
   Requested: 6,720 tons.
   Offered: 6,720 tons.

Glycerine.
   Requested: 6,720 tons.
   Offered: 6,720 tons.
   3,360 in first six months.
   3,360 tentative in second six months.

Caustic Soda.
   Requested: 40,320 tons.
   Offered: 40,320 tons.

Ethyl Alcohol.
   Requested: 107,520 tons.
   Offered: 107,520 tons.

Acetone.
   Requested: 6,720 tons.
   Offered: 6,720 tons.

Other Chemicals.
   Requested: 12,096 tons.
   Offered: 12,096 tons.
   (Other than items specifically mentioned and subject to specifications as to types, quantities, and delivery schedules.)

Tires, Tubes and other Rubber Products (containing 36,000 tons of rubber).
   Requested: 40,320 tons.
   Offered: 40,320 tons (rubber or its equivalent).
   (In addition to rubber and rubber products supplied with planes and other military vehicles.)
   20,160 tons in first six months.
   20,160 tons tentative in second six months.

Parchment Paper.
   Requested: 1,680 tons.
   Offered: 1,680 tons.

Condensor Paper.
   Requested: 146 tons.
   Offered: 146 tons.

Cigarette Paper.
   Requested: 336 tons.
   Offered: 336 tons.

Sheet Fiber.
   Requested: 1,680 tons.
   Offered: 1,000 tons.
Metallic Cloth and Screen.
Requested: 200,000 square meters.
Offered: $1,000,000.

Industrial Equipment.
(All Weights in Short Tons.)
Requests of the U.S.S.R. for industrial equipment, as listed below, total approximately $700,000,000. These requests are in excess of quantities of previously approved orders remaining undelivered from factories on the 30th June, 1943, estimated at $373,000,000. The amounts "offered" below, totalling approximately $454,000,000 represent the total amounts of both old and new orders to be delivered from factories during the Third Protocol period providing new orders placed by the U.S.S.R. contain specifications, delivery schedules, and supplies acceptable to the United States.

In addition to the offerings listed below there will remain available to the U.S.S.R. delivered from factories but unexported as of the 30th June, 1943, equipment estimated at $78,000,000.

In order to insure the constant flow of industrial equipment required for the U.S.S.R. war program, the United States will consider the approval of orders totaling not in excess of $300,000,000 for delivery after the 30th June, 1944. These orders will be considered in addition to the quantities specified for delivery during the Third Protocol period provided that lists of all equipment and projects be submitted to the United States for review and consideration and provided that, after review, it is found possible to incorporate such equipment and projects into United States production schedules.

Hard Alloys, Cutting and Measuring Tools.
Requested: $21,000,000.
$3,000,000 Hard Alloys and Cutting Tools.
$18,000,000 Cutting and Measuring Tools.
Offered: $21,000,000.
$3,000,000 Cemented Carbide Tips and Blanks.
$2,444,000 New Orders.
$556,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
$15,000,000 Cutting Tools.
$13,200,000 New Orders.
$1,800,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
$3,000,000 Measuring Tools.
$1,700,000 New Orders.
$1,300,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)

Abrasives.
Requested: 6,136 tons.
Offered: 4,000 tons Abrasive Grain.
3,600 tons New Orders.
400 tons Old Orders undelivered on the 30th June, 1943. (Estimated.)
$4,000,000 Abrasive Products.
$2,300,000 New Orders.
$1,700,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
Graphite Electrodes and Other Graphite Products.
Requested: 7,448 tons.
Offered: 8,568 tons.
5,757 tons Graphite Electrodes New Orders.
1,691 tons other Graphite Goods.
1,409 tons New Orders (subject to specifications as to types, quantities and delivery schedules).
282 tons Old Orders undelivered on the 30th June, 1943. (Estimated.)
1,120 tons Graphite Powder New Orders.

Bearings, Balls and Rolls.
Requested: 33,000,000 pieces.
5,000,000 Bearings.
28,000,000 Balls and Rolls.
Offered: $15,000,000 anti-friction bearings, including balls and rolls, to be supplied from Old Orders undelivered on the 30th June, 1943.

Machine Tools.
Requested: $228,621,550 (24,000 units).
Offered: $120,000,000.
$10,000,000 New Orders.
$110,000,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)

Presses, Forging and Rolling Mill Equipment.
Requested: $82,000,000.
Offered: $48,000,000.
$16,000,000 Rolling Mills and Equipment.
$11,000,000 New Orders, production of which will begin in 3rd quarter.
$5,000,000 Old Orders undelivered on 30th June, 1943. (Estimated.)
$30,000,000 Presses, Forges, Hammers and Related Equipment to be supplied from Old Orders undelivered on 30th June, 1943. (Estimated.)
$2,000,000 Wire Drawing Equipment.
$1,000,000 New Orders.
$1,000,000 Old Orders undelivered on 30th June, 1943. (Estimated.)

Electric Furnaces.
Requested: $12,000,000 (600 units).
Offered: $12,000,000.
$10,000,000 New Orders.
$2,000,000 Old Orders undelivered on 30th June, 1943. (Estimated.)

Industrial Plants and Desalting Units.
Requested: 12 plants and desalting units.
Offered: As listed below.

Breakdown.

I. Synthetic Rubber and Alcohol Plants.
Requested: 6.
1 Butadiene Plant 20,000-ton capacity.
1 Styrene Plant with 7,000-ton annual capacity.
1 Buna S Plant with 25,000-ton annual capacity.
1 Neoprene Plant with 10,000-ton annual capacity.
1 Butyl Rubber Plant with 3,000-ton annual capacity.
1 Synthetic Alcohol Plant with 20,000-ton annual capacity.
Offered: None.
(To be considered at a later date.)
II. Cord and Chafer Plant.
   Requested: 1 with daily capacity of 47 tons of cord and 8 tons of chafer.
   Offered: None.

III. Toluene Plant.
   Requested: 1 with annual capacity of 20,000–30,000 tons.
   Offered: None.

IV. Catalytic Cracking Units.
   Requested: 2, each with annual capacity of 100,000 tons.
   Offered: Under Study.

V. Catalyst Plant.
   Requested: 1 to produce catalyst for Houdry Units.
   Offered: Under Study.

VI. Petreco Desalting Units.
   Requested: Sufficient for lubrication oil plant and refinery plants ordered in
   1942.
   Offered: Under Study.

VII. Phenol Plant.
   Requested: 1.
   Offered: None.

Airplane Propeller Plant.
   Requested: 1 with annual capacity of 75,000 hollow-blade propellers.
   Offered: Under Study.

Various Industrial Equipment.
   Requested: $132,000,000.
   Offered $132,000,000.
   $12,500,000 Excavators to be supplied from old orders undelivered the
   30th June, 1943.
   $2,000,000 Truck and Tractor Cranes.
   $20,000,000 other Cranes, including portal, locomotive, floating, overhead
   and gantry cranes, trolleys for overhead cranes, monorail systems, &c.
   Supply of the above two offerings for cranes will consist of $7,600,000
   new orders and $14,400,000 old orders undelivered on the 30th June,
   1943. (Estimated.)
   $9,000,000 Compressors, gas blowers, exhausters, and fans.
   $3,500,000 New Orders.
   $5,500,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
   $8,000,000 Pumps.
   $4,000,000 New Orders.
   $4,000,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
   $10,000,000 Mining Equipment, Ore Dressing, Handling and Transporting
   Equipment to be supplied from old orders undelivered on the 30th June,
   1943. (Estimated.)
   $10,000,000 Equipment for Blast, Hearth and Coke Furnaces.
   $2,700,000 New Orders.
   $7,300,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
   $4,000,000 Welding Equipment.
   $1,200,000 New Orders.
   $2,800,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
   $3,000,000 Valves and Fittings.
   $200,000 New Orders.
   $2,800,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
$5,000,000 Pneumatic Tools.
$4,100,000 New Orders.
$900,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)
$12,000,000 Automatic Block Signal System from old orders undelivered on the 30th June, 1943. (Offering represents 3,000 km. Priority ratings to be assigned will be equivalent to those granted similar equipment being supplied domestic consumers.)
$36,500,000 Auxiliary Industrial Equipment to be supplied from Old Orders undelivered on the 30th June, 1943. In addition to the above offer for auxiliary industrial equipment, there will remain undelivered on old orders on the 30th June, 1943, quantities estimated at $64,000,000. It is requested that these orders be examined carefully in order that those no longer urgently needed may be cancelled. Such orders as are uncancelled will be allowed to remain in production under present priority ratings and will be made available when completed.

Power Equipment, Including Equipment and Boilers for Existing Plants.
Requested: $135,000,000.
Offered: $75,000,000.
$57,000,000 New Orders.
$18,000,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)

Electric Power Cable.
Requested: 12,000 km.
Offered: 12,000 km.

Control Instruments and Testing Machines.
(Precision Measuring and Testing Machines and Instruments.)
Requested: $2,000,000.
Offered: $1,700,000.
$840,000 New Orders.
$860,000 Old Orders undelivered on the 30th June, 1943. (Estimated.)

Emergency Equipment.
Requested: $60,000,000.
Offered: $25,000,000 urgent emergency equipment.

Stockpiles.
(All Weights in Short Tons.)

It is estimated that there will remain unexported as of the 30th June, 1943, the following:—

Metals, Chemicals and Other Products.
Stockpile: 617,000 tons. Shipping Weight: 662,000.

Industrial Equipment.
Stockpile: 107,000 tons. Shipping Weight: 108,000.

Food Products.
(Equal Monthly Installments.)
(All Weights in Short Tons.)
(The amounts offered below include quantities to be delivered during the Third Protocol Period.)

Wheat, Flour, Cereals, Rice and Beans.
Requested: 1,680,000 tons.
Offered: $1,180,000 tons.
2473,280 tons wheat.
293,440 tons flour.
179,200 tons cereals.
49,280 tons rice.
151,200 tons beans.
33,600 tons peas.

Sugar.
Requested: 436,800 tons.
Offered: 436,800 tons.
112,000 tons United States Mainland.
324,800 tons other sources.
The possibilities of supplying a larger proportion from the United States Mainland are being studied.

Canned Meats.
Requested: 470,400 tons.
Offered: 224,000 tons.

Meat Products (Cured and Smoked Meats).
Requested: 0.
Offered: 20,000 tons.

Animal Fats and Fat Cuts.
Requested: 246,400 tons.
Offered: 327,200 tons.
288,000 tons animal fats and fat cuts.
39,200 tons butter.

Vegetable Oil and Products, including Shortening and Margarine.
Requested: 280,000 tons.
Offered: 225,000 tons.

Concentrates.
Requested: 178,080 tons.
Offered: 252,000 tons.
17,920 tons dry skim milk.
8,960 tons dry whole milk.
39,200 tons dried eggs.
13,440 tons sweetened condensed milk.
28,000 tons dehydrated vegetables.
26,880 tons dehydrated soups and cereals.
89,600 tons soya products.
16,800 tons cheese.
5,600 tons tomato paste.
5,600 tons concentrated juices.

Soap.
Requested; 22,400 tons.
Offered: 11,200 tons.

*Other parties to the protocol will supply the balance of the request.*
United Kingdom Schedule of Supplies and Shipments.

The Government of the United Kingdom undertake, subject to the provisions of the Protocol and to the marginal comments in respect of particular items, to make available for despatch to the Government of the Union of Soviet Socialist Republics during the period the 1st July, 1943, to the 30th June, 1944, the supplies set out below.

The Government of the United Kingdom undertake, subject to the provisions of Article II of the Protocol, to provide the shipping tonnage necessary, with any Soviet tonnage which may be available, to lift the supplies set out below save that such undertaking will not apply to lead and wool originating in Australia and New Zealand, nor to supplies originating in North America, which, by agreement between the Governments of the United States and United Kingdom, are to continue to be carried in United States ships. These supplies will be despatched either to the Persian Gulf or to Soviet Northern ports, whichever, in the light of changing circumstances, proves from time to time to be more practicable. In the choice of routes for the despatch of particular supplies, regard will be had to the wishes of the Soviet Government so far as the factors mentioned in Article II of the Protocol permit.

Except where otherwise stated, the amounts offered include any outstanding balances of items agreed to be supplied under the Second Protocol which were not shipped or booked for shipment on a named vessel before the 1st July, 1943, as well as any quantities of such items which have been lost in transit to the Union of Soviet Socialist Republics before the 1st July, 1943, where agreement to replace such losses has not been communicated to the Soviet authorities before the said date.

It is appreciated that reasonable stockpiles of stores must be maintained, so that the Union of Soviet Socialist Republics can, as shipping opportunities occur, select cargo for shipment that is most needed to meet the ever changing requirements of war. However, the United Kingdom reserves the right to limit the size of such individual stockpiles either by control of production or diversion of product or both, when in its judgment such action is in the best interest of the common cause. In taking such action due consideration will be given to the expressed needs of the Union of Soviet Socialist Republics.
Programme of Supplies From the United Kingdom to the Union of Soviet Socialist Republics During the Period 1st July, 1943, to 30th June, 1944.

(All weights in long tons unless otherwise stated)

GROUP I.—Armaments and Military Equipment—

1. Aircraft.—For the first six months, 150 Airacobras and 50 Hurricanes a month. In the second six months 150 Airacobras or type P. 63 and 50 fighter aircraft of British type. (The aircraft of American type will be supplied in accordance with agreements made with the Government of the United States involving an exchange of certain aircraft from United Kingdom production.)

2. Tanks.—1,000 tanks (Valentines). Maintenance spares for twelve months will be supplied both for tanks and their guns in accordance with a generous comprehensive spare parts schedule based upon experience of the normal replacement requirements of the parts concerned.

3. Propellant.—
   (a) R.S. type—2,250 short tons during the first six months in addition to about 2,500 short tons which had not been shipped by the 1st July, 1943.
   (b) W.M. 017—1,600 short tons which had not been shipped by the 1st July, together with such surplus as is subsequently manufactured while production is being brought to an end.

4. Aviation Spirit.—10,000 tons a month to be made available at Abadan in accordance with an agreement with the United States Government, whereby the latter will make a similar quantity available to the United Kingdom Government out of the amount of aviation spirit allocated by the United States Government to the Government of the U.S.S.R.

GROUP II.—Various Materials—

1. Tin.—6,000 tons. (Less any amounts over 6,000 tons received by the U.S.S.R. from China.)

2. Lead.—12,000 tons from Australia.

3. High-speed steel.—60 tons subject to specification.

4. Cobalt.—72 tons in second six months.

5. Industrial diamonds.—2,400,000 dollars, subject to specification.

6. Rubber.—12,000 tons for first six months from Ceylon so long as that source is open, and in addition to any balance of supplies under Second Protocol not shipped from Ceylon before the 1st July, 1943. Subsequent supply to be considered.

7. Jute.—36,000 tons to be provided in whole or in part as articles made of jute so far as manufacturing capacity in India permits production of the articles desired by the U.S.S.R.

8. Sisal.—6,000 tons for second half of 1943, of which whole or part may be taken in manufactured goods subject to specifications being agreed, including 1,720 long tons already agreed to be supplied, but excluding any part of 1,000 short tons of Mexican Henequin which is being supplied by the United States.

9. Shellac.—2,400 tons.

10. Wool.—24,000 tons. On a “scoured” basis from various sources.

11. Graphite.—1,200 tons. Dependent upon conditions in Ceylon.

*Dependent upon Indian conditions.
12. **Cresol**—190 tons in the first six months, subject to acceptance of the specification offered.

**GROUP III.—Industrial Equipment**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Specification No.</th>
<th>Delivery Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Machine Tools</td>
<td>3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Steam-driven electric power units complete with boilers—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25,000 k.w.</td>
<td>7</td>
<td>188N, 189N</td>
<td>By November 1944. Delivery of the remaining 25 per cent. will be considered in six months' time.</td>
</tr>
<tr>
<td>12,000 k.w.</td>
<td>4</td>
<td>196N, 197N</td>
<td></td>
</tr>
<tr>
<td>4,500 k.w.</td>
<td>1</td>
<td>207N, 218N</td>
<td></td>
</tr>
<tr>
<td>3. Small Stations—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100/500 k.w. (Average 400 k.w.)</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mobile Stations—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000 k.w.</td>
<td>6</td>
<td>238N</td>
<td></td>
</tr>
<tr>
<td>2,500 k.w.</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000 k.w.</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Turbo-alternators—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25,000 k.w.</td>
<td>2</td>
<td>296N</td>
<td></td>
</tr>
<tr>
<td>12,000 k.w.</td>
<td>2</td>
<td>294N</td>
<td></td>
</tr>
<tr>
<td>5,000 k.w.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,500 k.w.</td>
<td>5</td>
<td>206N, 212N, 233N, 294N</td>
<td></td>
</tr>
<tr>
<td>1,500 k.w.</td>
<td>5</td>
<td>199N, 211N, 214N, 228N</td>
<td></td>
</tr>
<tr>
<td>6. Steam Armature</td>
<td>75 per cent. in value of 7,650 units</td>
<td>188N, 189N</td>
<td>By November 1944. Delivery of the remaining 25 per cent. will be considered in six months' time.</td>
</tr>
<tr>
<td>7. Pumps</td>
<td>68 of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>194N, 210N</td>
<td>By March 1945.</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>261N, 266N</td>
<td>By April/May 1944.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>210N, 218N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>214N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remaining units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Compressors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Electrical Equipment—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Power Transformers</td>
<td>144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Current and Potential Transformers</td>
<td>529</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Oil Circuit Breakers</td>
<td>500 of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 against Item 2</td>
<td></td>
<td>By March 1945.</td>
<td></td>
</tr>
<tr>
<td>25 against Item 3</td>
<td></td>
<td>Delivery in accordance with agreement to be reached.</td>
<td></td>
</tr>
<tr>
<td>75 against Item 4</td>
<td></td>
<td>By March 1945.</td>
<td></td>
</tr>
<tr>
<td>100 against Item 5</td>
<td></td>
<td>By April/May 1944.</td>
<td></td>
</tr>
<tr>
<td>125 against Item 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 against Item 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Isolating Switches</td>
<td>1,000</td>
<td>227N, 259N</td>
<td>By March 1945.</td>
</tr>
<tr>
<td>(e) Storage Batteries</td>
<td>10</td>
<td>298N</td>
<td>By April/May 1944.</td>
</tr>
<tr>
<td>(f) Relays</td>
<td>1,000</td>
<td>187N, 259N</td>
<td>By March 1945.</td>
</tr>
<tr>
<td>(g) Metal-clad Switchgear</td>
<td>500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*One Station containing two 25,000 k.w. Turbo-alternators and five Stations each containing one 25,000 k.w. Turbo-alternator.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Specification No.</th>
<th>Delivery Date</th>
</tr>
</thead>
</table>
| (a) Alternators    | 90 of which:  
5 against item 1  
5 against item 2  
15 against item 3  
15 against item 4  
15 against item 5  
25 against item 1  
10 against item 2 | 220N      | By July 1944.     |
| (d) Heavy Current Generators | 40 (36 per cent. of Soviet request) of which:  
10 against item 1  
10 against item 2  
10 against item 3  
10 against item 4 | 220N      | By December 1944. |
| (j) Motors and Starters | 55 per cent. in value of 20,000 motors and starters | 219N, 240N | By July 1944. |
| (k) Motors and Starters | 30 per cent. in value of 55 per cent. in value of | 222N, 240N | By December 1944. |
| (l) Sub-stations   | 150      | 233N              | Delivery in accordance with agreement to be reached. |

10. Mining and other Equipment—

<table>
<thead>
<tr>
<th>Item</th>
<th>150</th>
<th>165N, 180N</th>
<th>By March 1945.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Locomotives</td>
<td></td>
<td>200N</td>
<td></td>
</tr>
</tbody>
</table>
| Electric Trucks    | 150 of which:  
130                      | 220N | Delivery in accordance with agreement to be reached. |
|                     | 20   |            |                |

<table>
<thead>
<tr>
<th>Item</th>
<th>50</th>
<th>203N</th>
<th>By May 1944.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drill Sharpeners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnetic Separators</td>
<td>26</td>
<td>205N, 207N</td>
<td>By March 1945.</td>
</tr>
<tr>
<td>Shell Forging Installations</td>
<td>2</td>
<td>200N</td>
<td>By November 1944.</td>
</tr>
<tr>
<td>Conveyors</td>
<td>40</td>
<td>244N</td>
<td>Delivery in accordance with agreement to be reached.</td>
</tr>
<tr>
<td>Portal Cranes</td>
<td>20</td>
<td>231N</td>
<td></td>
</tr>
<tr>
<td>Rolling Mills</td>
<td>5</td>
<td>222N</td>
<td></td>
</tr>
</tbody>
</table>

11. Hydro-electric Plants—

| Item               | 30,000 k.w. | 192N | To be delivered by 31st (part) March, 1945. |

GROUP IV.—Quartermaster Goods.—Nil.

GROUP V.—Medical Supplies—

The detailed list of Soviet requirements attached hereto is under examination. No overall commitment in terms of money can, however, be given.

[GROUP VI.—] Food Supplies—

To be delivered in quantities to be agreed upon between the respective parties in accordance with shipping space in the tonnage referred to in the preamble to this schedule, and supplies available.
List of Soviet Requirements for Medical Supplies Mentioned in Group V.

Medical Instruments and Equipment.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syringes “Record” with two needles, sizes 2.0 c.c.–20.0 c.c.</td>
<td>95,000</td>
</tr>
<tr>
<td>Syringes for tuberculin injection, sizes 0.5 c.c.–1.0 c.c.</td>
<td>5,000</td>
</tr>
<tr>
<td>Needles with cannula “Record,” various sizes</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Needles for blood transfusion</td>
<td>50,000</td>
</tr>
<tr>
<td>Pean’s artery forceps</td>
<td>50,000</td>
</tr>
<tr>
<td>Halstead’s artery forceps</td>
<td></td>
</tr>
<tr>
<td>Adson’s artery forceps</td>
<td></td>
</tr>
<tr>
<td>Scissors, “Cooper”</td>
<td>25,000</td>
</tr>
<tr>
<td>Straight, blunt-pointed scissors</td>
<td>50,000</td>
</tr>
<tr>
<td>Quartz-mercury-vapour lamp, portable, “Bach”</td>
<td></td>
</tr>
<tr>
<td>Straight dental handpieces for dental drilling machine</td>
<td>25,000</td>
</tr>
<tr>
<td>Angular dental handpieces for dental drilling machine</td>
<td>25,000</td>
</tr>
<tr>
<td>Hose for dental drilling machine</td>
<td>5,000</td>
</tr>
<tr>
<td>Portable Primus stoves</td>
<td>1,000</td>
</tr>
<tr>
<td>Electrocardiographs with accessories sets</td>
<td>25</td>
</tr>
<tr>
<td>Electromagnets for removal of foreign substances from eyes, with rectifier for 110–220 volt, type Millinger</td>
<td>50</td>
</tr>
<tr>
<td>Electric dental drilling machine with hoses and handpieces, 110–220 volt</td>
<td>500</td>
</tr>
<tr>
<td>Electric centrifuges (Sharpsless) of different powers</td>
<td>10</td>
</tr>
<tr>
<td>Supercentrifuges of different powers</td>
<td>10</td>
</tr>
<tr>
<td>Portable X-ray units with generators</td>
<td>100</td>
</tr>
<tr>
<td>X-ray units, stationary</td>
<td>200</td>
</tr>
<tr>
<td>Large optometric glasses sets</td>
<td>1,000</td>
</tr>
<tr>
<td>Dental forceps sets</td>
<td>8,000</td>
</tr>
<tr>
<td>Glasses for spectacles of different diopters (plus and minus) pairs</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Cases of trial lenses</td>
<td></td>
</tr>
<tr>
<td>Frames for spectacles</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Eye prosthesis</td>
<td></td>
</tr>
<tr>
<td>Observation cystoscopes with lamps and 12 spare lamps for each separately</td>
<td>300</td>
</tr>
<tr>
<td>Irrigation cystoscopes with lamps and 12 spare lamps for each separately</td>
<td>300</td>
</tr>
<tr>
<td>Catheteric cystoscopes with lamps and 12 spare lamps for each separately</td>
<td>200</td>
</tr>
<tr>
<td>Children’s cystoscopes with lamps and 12 spare lamps for each separately</td>
<td>200</td>
</tr>
<tr>
<td>Diagnostic tubes for X-ray units</td>
<td>1,000</td>
</tr>
<tr>
<td>Diagnostic Kenatrone valves</td>
<td>1,000</td>
</tr>
<tr>
<td>Saws, “Olivechrona”</td>
<td></td>
</tr>
<tr>
<td>Conductors, “Martel,” for saws, “Olivechrona”</td>
<td></td>
</tr>
<tr>
<td>Leaden glasses for translucent screens, 30 x 40 cm</td>
<td>1,000</td>
</tr>
<tr>
<td>Dental eau de chou (Dentalit) tons</td>
<td>2</td>
</tr>
<tr>
<td>Dental cement, type Ercendent. portions</td>
<td>20,000</td>
</tr>
<tr>
<td>Dental cement, oxy-phosphate. portions</td>
<td>20,000</td>
</tr>
<tr>
<td>X-ray films boxes</td>
<td>10,000</td>
</tr>
<tr>
<td>Safety pins</td>
<td>100,000,000</td>
</tr>
</tbody>
</table>
Medical Instruments and Equipment—Continued

42. Rubber-proofed material for first-aid outfits .................................. metres ........................................... 1,000,000
43. Pot-stills 4 .................................................................
44. Forceps, "Borchard" ....................................................

Medicaments.

45. Ascorbic acid .............................................................
46. Aspirin ........................................................................... tons ..................................................................... 100
47. Medical glucose ......................................................... tons ..................................................................... 100
48. Insulin, 40 units per 1 c.c............................................ bottles .................................................................. 200,000
49. Insulin, zinc, protamine .............................................. bottles .................................................................. 50,000
50. Pure caffein ............................................................... tons ..................................................................... 10
51. Pure codeine ............................................................. tons ..................................................................... 2
52. Codeine phosphate ..................................................... ton ....................................................................... 1
53. Novocaine (procaine hydrochloride) (see item 78) ...........
54. Luminal (Phenobarbitone) ........................................... tons ..................................................................... 3
55. Peptone ............................................................................ tons ..................................................................... 5
56. Chinosol (Pot. Hydroxyquinoline Sulphate) ................. tons ..................................................................... 0.5
57. Nicotinic Acid ............................................................. tons ..................................................................... 0.1
58. Arabinose .................................................................
59. Mannite .................................................................
60. Maltose ...........................................................................
61. Pancreatin ................................................................. tons ..................................................................... 0.5
62. Lactose ...........................................................................
63. Citric acid ..................................................................... tons ..................................................................... 15
64. Caustic potash ......................................................... tons ..................................................................... 12.5
65. Digalen ........................................................................... tons ..................................................................... 3
66. Pyridine (pure) ............................................................ tons ..................................................................... 30
67. Salicylic acid .............................................................. tons ..................................................................... 50
68. Acetanilide .................................................................... tons ..................................................................... 100
69. Cocoa-butter ............................................................. tons ..................................................................... 10
70. Peppermint oil .......................................................... ton ........................................................................ 1
71. Calcined magnesia ........................................................ tons ..................................................................... 1
72. Sodium citrate ............................................................ tons ..................................................................... 5
73. Sodium salicylate (theobromine diuretin) (see item 88) tons ..................................................................... 25
74. Gold and sodium thiosulphate ......................................... ton ...................................................................... 1
75. Sodium bromide ........................................................ tons ..................................................................... 20
76. Pyramidon (Amidopyrin) ........................................... tons ..................................................................... 20
77. Phenacetin .................................................................
78. Procaine hydrochloride (see item 53) ......................... tons ..................................................................... 2
79. Rivanol .................................................................
80. Sulphanilamide (streptocide) ........................................ tons ..................................................................... 20
81. Sulphapyridine ..........................................................
82. Soda crystals ............................................................. tons ..................................................................... 100
83. Lead acetate .............................................................. ton ........................................................................ 1
84. Salol .............................................................................. tons ..................................................................... 25
85. Sulphathiazole ........................................................... tons ..................................................................... 5
86. Seeds of Nux vomica (Strychnine) .............................. tons ..................................................................... 3
87. Strophanthus seeds ..................................................... tons ..................................................................... 3
88. Theobromine sodium salicylate (Diuretin) (see item 73) tons ..................................................................... 10
89. Tannin ............................................................................ tons ..................................................................... 5

4 Precise definition of these items awaited.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.</td>
<td>Chloramine</td>
<td>50 tons</td>
</tr>
<tr>
<td>91.</td>
<td>Hexobarbitone sodium (Evipan sodium), 0.5 cc. ampoules</td>
<td>500,000</td>
</tr>
<tr>
<td>92.</td>
<td>Lobeline in ampoules</td>
<td>10,000,000</td>
</tr>
<tr>
<td>93.</td>
<td>Magnesium sulphate, 50 per cent. in ampoules 2.0 cc. ampoules</td>
<td>500,000</td>
</tr>
<tr>
<td>94.</td>
<td>Camphor in ampoules</td>
<td>10,000,000</td>
</tr>
<tr>
<td>95.</td>
<td>Ethyl chloride in ampoules</td>
<td>2,000,000</td>
</tr>
<tr>
<td>96.</td>
<td>Cardiamine (metrazol) in ampoules (see item 98) ampoules</td>
<td>1,000,000</td>
</tr>
<tr>
<td>97.</td>
<td>Morphia in ampoules</td>
<td>10,000,000</td>
</tr>
<tr>
<td>98.</td>
<td>Cardiazol in ampoules (see item 96)</td>
<td>500,000</td>
</tr>
<tr>
<td>99.</td>
<td>Fuchsine (Magenta)</td>
<td>..</td>
</tr>
<tr>
<td>100.</td>
<td>Eosin</td>
<td>..</td>
</tr>
<tr>
<td>101.</td>
<td>Serums for Catalepsy and gangrene (subject to specifications)</td>
<td>..</td>
</tr>
</tbody>
</table>
Canadian Schedule of Supplies.

Subject to the provisions of the Protocol, the Canadian Government undertakes to make available at Canadian ports of exit during the period the 1st July, 1943, to the 30th June, 1944, for shipment to the Union of Soviet Socialist Republics the supplies set out below. The items in this schedule of supplies are offered subject to the ability of Canada to meet the specifications requested by the Union of Soviet Socialist Republics.

It is appreciated that reasonable stockpile of stores must be maintained, so that the Union of Soviet Socialist Republics can select cargo for shipment that is most needed to meet the ever-changing requirements of war. However, Canada reserves the right to limit the size of such individual stockpiles either by control of production or diversion of product, or both, when in its judgment such action is in the best interest of the common cause. In taking such action due consideration will be given to the expressed needs of the Union of Soviet Socialist Republics:

1. Powder
   (a) Cordite WMO17 32" and 16"
      (16" not to be more than one-third of total).
   From November 1943 to 30th June, 1944, Canada will endeavour to supply at least 600 short tons per month (see note).
   (b) Pyroxyline powder for 3" gun,
       Pyroxyline powder for 90-mm. gun.
       500 short tons per month (see note).
   (c) Nitroglycerine powder........... (Stick propellant) up to 400 short tons per month (see note).
   (d) Rifle Pyroxyline powder........ 100 short tons per month.

Notes (a), (b) and (c).—If arrangements can be worked out with the Government of the United States to increase the supply of (b) to the U.S.S.R., and if as a consequence the Canadian commitment under (b) is reduced, this may make it possible to increase the Canadian commitment under (a). The supply under (c) is dependent upon solving production problems.

2. Machine Tools
   Maximum amount $12,000,000 (covering machine tools and industrial machinery).
3. Industrial Machinery
4. Medical Supplies
   Dependent upon supply position.
5. Aluminium Ingots................................. 1,500 short tons per month.
7. Cadmium........................................... Up to 224 short tons for Protocol period.
8. Ferrosilicon..................................... 336 short tons per month.
9. Ferrochrome.................................... 224 short tons per month.
10. Wheat and Flour................................. 300,000 short tons of wheat—to be included in this quantity up to 200,000 short tons of wheat flour. The tonnage of flour included is dependent upon production possibilities in Canada and upon firm shipment commitment from the U.S.S.R. Any flour or wheat shipments will be charged against the Wheat Credit Agreement dated the 8th September, 1942, until the credit provided by Canada under this agreement is exhausted.

11. Signal Cartridges 1''................................. 90,000.
12. Lead.................................................. 10,000 short tons in Protocol period.
   The provision of additional 10,000 tons will be considered in December 1943.
13. Flat Cars........................................... 2,000. The provision of an additional 2,000 will be considered in November 1943.
14. Rails (75 lbs. less accessories).................. 40,000 tons (10,000 per month in September, October, November and December). The provision of additional quantities will be considered in October 1943.
16. Ship Repairs...................................... The maximum dollar value is subject to negotiations.
   In an amount to be negotiated.
17. Cranes.............................................
18. Lorries—
   (a) Mobile machine shops, work shops, &c.—up to 1,370 units. These items are included in a previous nonprotocol agreement between the U.S.S.R. and the United Kingdom and are being manufactured in Canada.
   (b) 220 trailer gas welding units to accompany KL units in (a) above. This is an additional offer.

A firm offer cannot be made at present; if production of ammunition can be increased, the number of equipments and rounds of ammunition to be provided will be subject to negotiation.
20. Power Plants and Plant Equipment. Supply and maximum dollar value are subject to negotiation.

21. Mosquito Bombers. The possibilities of supply are dependent upon production. The request will be reconsidered in December 1943.

22. Wooden Minesweepers. The supply of this item depends upon the production programme of diesel motors which is under study. It will be reconsidered in December 1943.

Notes.—Other items requested which, on account of production, and for other reasons, it will be necessary to review at a later date:—
(1) Locomotive.
(2) 25-pdr. guns with self-propelled mounts.
OTTAWA PROTOCOL

Fourth Protocol

July 1, 1944 to June 30, 1945
FOURTH PROTOCOL

Fourth Protocol Between the Union of Soviet Socialist Republics and the United States, United Kingdom and Canada for the Period July 1, 1944 to June 30, 1945

The Government of the United States, the Government of the United Kingdom and the Government of Canada recognizing the outstanding contribution of the Union of Soviet Socialist Republics in the prosecution of the war against the common enemy, and desiring to continue to provide the Government of the Union of Soviet Socialist Republics with the maximum assistance possible in meeting its war needs in the form of military supplies, raw materials, industrial equipment and food, and the Government of the Union of Soviet Socialist Republics desiring to assist the Governments of the United States, the United Kingdom and Canada in meeting their war needs for raw materials and other supplies, have agreed as follows:

ARTICLE I

The Governments of the United States, the United Kingdom and Canada, undertake to make available for dispatch to the Government of the Union of Soviet Socialist Republics the supplies mentioned in the schedules annexed hereto under the conditions stated therein.

ARTICLE II

The Governments of the United States and the United Kingdom will aid in the movement of the supplies offered, by furnishing shipping as set forth in the schedules annexed hereto, it being understood that these commitments as to shipping may be reduced if shipping losses, lack of escorts, deficiencies in the anticipated capacity of the available routes, the necessities of other operations, or the exigencies of the situation render their fulfillment impracticable.

ARTICLE III

The Government of the Union of Soviet Socialist Republics undertakes to make available to the Governments of the United States, the United Kingdom and Canada, within the period covered by the present Protocol, such raw materials, other supplies and services as may be

782145—47—7

89
available and as are desired by said Governments in the prosecution of the war.

**Article IV**

The financial arrangements concluded between the Government of the Union of Soviet Socialist Republics and the Government of the United States in connection with supplies furnished in pursuance of the present Protocol may be in accordance with the terms and conditions of the Master Lend-Lease Agreement of June 11, 1942, and with the terms and conditions of any amendment to said agreement which may hereafter be concluded by mutual agreement or the Government of the Union of Soviet Socialist Republics may elect to purchase from the United States schedules of supplies for cash.

The financial arrangements between the Government of the Union of Soviet Socialist Republics and the Government of Canada in connection with the supplies to be furnished by the Government of Canada in pursuance of the present Protocol shall be in accordance with the terms and conditions of the Mutual Aid Agreement of February 11, 1944, between the two Governments for such supplies as the Government of Canada may authorize under Articles I and III thereof, and for other supplies shall be in accordance with the terms and conditions of special agreements or understandings between the two Governments.

The financial arrangements under which supplies will be furnished by the Government of the United Kingdom to the Government of the Union of Soviet Socialist Republics in pursuance of this Protocol, shall be in accordance with the terms and conditions of the cash-credit agreement of the 16th August 1941, for civil supplies, and the agreement of the 27th June 1942, governing military supplies, or with the terms and conditions of any amendments to the said two agreements which may hereafter be concluded by mutual consent.

**Article V**

The lists of supplies in the schedules annexed hereto shall be subject to reallocation among the three supplying countries as they may decide among themselves in order to meet strategic, supply, or shipping exigencies. The lists of supplies shall also be subject to review and variation by the three supplying countries in the event of major changes in the war situation. If shipping losses, production failures, or the necessities of other operations render the fulfillment of the schedules prohibitive, it may be necessary to reduce them or to make diversions therefrom. On the other hand, if conditions permit, the Governments of the United States, the United Kingdom and Canada,
will be glad to review the schedules from time to time for the purpose of increasing the quantities to be provided and delivered.

In witness whereof the undersigned, duly authorized by their respective Governments, have signed the present Protocol.

Done in Ottawa in quadruplicate on the 17th day of April, 1945, in the English language.

For the Government of the United States of America:

Ray Atherton.

For the Government of the United Kingdom of Great Britain and Northern Ireland:

Malcolm MacDonald

For the Government of Canada:

W. L. Mackenzie King.

J L Ilsley

For the Government of the Union of Soviet Socialist Republics:

G Zabourin.
United States Schedules of Shipping and Supplies

Shipping

Subject to the provisions of Article II of this Protocol, the Government of the United States undertakes to aid the Government of the Union of Soviet Socialist Republics in the shipment from the Western Hemisphere to the Union of Soviet Socialist Republics during the Protocol period of a minimum of 5,700,000 short tons of supplies, 2,700,000 short tons to be shipped via the Pacific route and 3,000,000 short tons to be shipped via the Atlantic routes.

In addition to the 5,700,000 short tons committed above the Government of the United States undertakes to aid the Government of the Union of Soviet Socialist Republics in the shipment of such material as can be made available to meet the requirements of a list of supplies submitted to the Government of the United States by the Government of the Union of Soviet Socialist Republics on October 17, 1944.

The above undertakings are intended to provide shipping from the Western Hemisphere for all supplies including supplies furnished by the Governments of the United States, the United Kingdom, and Canada and all relief supplies.

To insure accomplishment of the above objective, the Government of the United States undertakes to supplement the Soviet Flag shipping which is presently employed in the Pacific route to the extent necessary to maintain shipments at an average rate of 225,000 short tons a month, with the understanding that the Government of the Union of Soviet Socialist Republics will use its best efforts in achieving the shortest possible turn-around in the Pacific trade which is consistent with prudent operation. It is further understood that should untoward events preclude or restrict the use of the Pacific route by the U. S. S. R., the United States shipping transferred to the Soviet Flag for employment on this route will be utilized on other routes from the Western Hemisphere to the U. S. S. R.

The Government of the United States undertakes to provide the shipping for movement by such Atlantic routes as may be available of an average of 250,000 short tons a month, provided such capacity proves to be available to the United States. The above undertaking for shipment by Atlantic routes is considered by the Government of
the United States to be a minimum and, if conditions permit, every effort will be made to exceed this minimum.

In addition to the foregoing undertaking for ocean shipment, the Government of the United States will aid the Government of the Union of Soviet Socialist Republics in the movement through the Persian Corridor of Petroleum products originating in the Persian Gulf area in an amount not to exceed 350,000 short tons.

**Supplies**

The Government of the United States will make available for shipment to the Government of the Union of Soviet Socialist Republics during the period of this Protocol, July 1, 1944 to June 30, 1945, from supplies made available under the Third Protocol but unshipped on July 1, 1944, and from quantities to be made available under this Protocol a minimum of 5,944,000 short tons of supplies as set forth in Annex I provided the quantities of specific items to be made available do not exceed the quantities of specific items offered in Annex II.

In addition to the supplies referred to above to be made available to the Union of Soviet Socialist Republics, the Government of the United States will endeavour to make available under the terms of this Protocol such additional material set forth in the list of supplies submitted to the Government of the United States by the Government of the Union of Soviet Socialist Republics on October 17, 1944 as can be provided within the limits of available resources. (To be designated after agreement on specifications as Annex III.)

Except as otherwise specified quantities will be made available at points of origin in the United States and as nearly as practicable in equal monthly installments. However, the Government of the United States reserves the right to make available from sources outside the United States such supplies as may be necessary to provide the specific items desired by the Government of the Union of Soviet Socialist Republics for delivery under this Protocol. The conditions under which specific items will be made available will be in accordance with the conditions of the offerings in Annex II forming a part of this Protocol.

Undertakings as to supplies are subject to the provisions hereinafter contained relative to stockpiles and specifications.

**Stockpiles**

While the need for reasonable stockpiles of supplies in the United States is appreciated, it is also recognized that the accumulation of excessively large stockpiles of supplies is not consistent with the most effective utilization in the common cause of production facilities and supplies of raw materials. Accordingly, it will be necessary for the
Government of the United States to limit the size of individual stockpiles either by control of production, by diversion of product, or by repossession, when in its judgment such action is in the best interest of the common cause. In taking such action, the Government of the United States will give due consideration to the expressed needs of the U.S.S.R.

Specifications

In order to produce and make available within the period of this Protocol the quantities of specific items desired by the Government of the Union of Soviet Socialist Republics, it is essential that specifications for such items be of such a nature and be submitted within such time as to adapt themselves to United States production policies and methods. In this connection, the United States stands ready to provide all possible information and assistance to the representatives of the Government of the U.S.S.R.

Arrearages

In the event of arrearages in the various items, the United States will, subject to shipping capabilities, the needs of the Soviet Government, other urgent war requirements and feasible production schedules, give all possible consideration to overcoming such arrearages.

General

The United States stands ready, through appropriate officials, to discuss with Soviet representatives in Washington all detailed questions pertaining to the schedule of shipping and supplies and any reasonable adjustments that may be desired.

It is desired to emphasize that the Government of the United States is not only willing but is very anxious to render the assistance outlined. The Soviet Government may rest assured that the provisions described in Articles II and V of this Protocol will not be invoked by the Government of the United States unless developments definitely require it and, then only, after due consideration is given to the needs of the U.S.S.R.

Above all, the United States desires again to assure the Union of Soviet Socialist Republics that it has a full understanding of the vital importance of the Soviet front and the urgent necessities of moving supplies to it in the highest possible volume and in the shortest space of time.
F I F T H   P R O T O C O L

ANNEX I

GROUP I.—Aircraft and Aircraft Equipment
61,000 short tons shipping weight and aircraft to be flight-delivered.

GROUP II.—Military Supplies
1,441,000 short tons shipping weight.

GROUP III.—Naval and Marine Supplies
48,000 short tons shipping weight and vessels proceeding under their own power.

GROUP IV.—Foodstuffs and Related Products
1,602,000 short tons shipping weight.

GROUP V.—Machinery and Equipment
443,000 short tons shipping weight.

Quantities to be made available will be from the following offerings in Group V of Annex I:

Old orders undelivered from factories as of June 30, 1944, estimated at $126,517,000 and $223,229,000 of orders authorized during the Third Protocol period for delivery during the Fourth Protocol period in accordance with Group V, paragraph I

New orders to be placed during the Fourth Protocol period in accordance with Group V, paragraph II

New orders to be placed in accordance with Group V, paragraph III

$349,746,000
$300,900,000
$481,807,000

GROUP VI.—Other Materials and Products
2,349,000 short tons shipping weight.

ANNEX II

Specific items requested by the Government of the Union of Soviet Socialist Republics which may be made available during the period July 1, 1944, to June 30, 1945, in equal monthly installments, at points of origin in the United States unless otherwise specified. Quantities include supplies from all requisitions, assignments or other procurement authorizations unfilled on June 30, 1944:

Due to changes in supply arrangements occasioned by the selections made by the Soviet Government in its note directed to the Secretary of State, dated October 30, 1944, the quantities of specific items to be made available will be limited to the quantities required to meet these
GROUP I.—Aircraft and Aircraft Equipment

U.S. Ref. No.

I-1A1 & A4 Pursuit Planes P-39 or P-63
Request: 2,450
(I A&M 1 part)
Offer: 2,450
2,400 from U. S.
50 from North African Theatre
For flight-delivery

I-1C Medium Bombers B-25
Request: 600
(I A&M 1 part)
Offer: 300
For flight-delivery

I-1D1 Heavy Bombers B-17
Request: 240
(I A&M 1 part)
Offer: 0

I-1D2 Heavy Bombers B-24
Request: 300
(I A&M 1 part)
Offer: 0

I-1E2 Transport Planes C-47
Request: 360
(I A&M 1 part)
Offer: 240
For flight-delivery

I-1E1 or E3 Transport Planes C-46 or C-57
Request: 120
(I A&M 1 part)
Offer: 0

I-1F Flying Boats
Request: 120
(I A&M 1 part)
Offer: 30
(60 additional will be supplied if conditions permit)
For flight-delivery

I-2 Spare Parts for Aircraft Furnished
Request: Spare engines and propellers—30% of those installed on planes.
(I A&M 1 part)

Airplane spare parts—20% of value of planes
Engine spare parts—15% of value of plane
Propeller spare parts—15% of value of propeller.

Offer: Spare parts will be supplied in accordance with U.S. Army standards which are in general equal to or in excess of amounts requested.

10,776 tons S.W.
FOURTH PROTOCOL

U.S. Ref. No.

I–6B Airplane Landing Mats
Request: 16,000,000 square feet
(Supplementary)
Offer: 16,000,000 square feet in first half (Seq. Rec. No. 5577) 36,600 tons S.W.
8,000,000 sq. ft. Bar and Rod type
8,000,000 sq. ft. Pierced plank type

GROUP II.—Military Supplies

II–1A2 Medium Tanks
Request: 3,173
(I A&M 2)
Offer: 3,173 M4A2 96,142 tons S.W.
1,537 in first half
1,636 in second half

II–2A Field Repair Trucks
Request: 222
(I A&M 3 part)
Offer: 222 1,347 tons S.W.
82—2½ ton 6x6 small arms repair with signal repair load.
41 in first half
41 in second half
140—trucks, Couse type, field repair shops—in second half

II–2C Tank Transporters
Request: 952
(I A&M 3 part)
Offer: 400–40 tons (with trailers) in second half 10,603 tons S.W.

II–3A1 Jeeps (¼ ton 4x4 trucks)
Request: 9,683—Spare parts 20% of “Jeep”
(I A&M 4)
Offer: 9,300—truck ¼ ton 4x4 command in first half 9,270 tons S.W.

II–3B1 Trucks, ¾ ton
Request: 28,144
(I A&M 3 part)
Offer: 16,000 4x4 weapons carriers 41,304 tons S.W.
4,800 in first half
11,200 in second half

II–3B2 Trucks, 1½ ton
Request: 41,821
(I A&M 3 part)
Offer: 41,436 159,276 tons S.W.
16,000 4x2 in first half
25,436 4x4
16,292 in first half
9,144 in second half
II-3B3 Trucks, 21/2 ton
Request: 79,790
(I A&M 3 part)
Offer: 73,560
30,000—6x4
14,473 in first half
15,527 in second half
43,560—6x6
19,157 in first half
24,403 in second half
434,787 tons S.W.

II-3B4 Trucks, 21/2 ton Amphibian
Request: 1,200
(I A&M 3 part)
Offer: 300 in first half
2,700 tons S.W.

II-3C Trucks—5 ton and over
Request: 1,140
(I A&M 3 part)
Offer: 1,040
240—6 or 7 1/2 ton prime mover in second half
700—10 ton 6x4 (Mack) in second half
100—5-6 ton 4x4 cargo fwd-su (for mounting compressors) in second half
12,403 tons S.W.

II-3D Trucks, Special Purpose
Request: 3,270
(I A&M 3 part)
Offer: 1,700
1,500—4 ton or 5 ton dump
320 in first half
1,180 in second half
100—Snow-plows, rotary type gasoline engine driven, on 6 ton 6x6 truck mounting—in first half
100—5 ton 4x2 dump trucks in second half
13,630 tons S.W.

II-3I Truck-Tractors With Trailers
Request: 1,275
(I A&M 3 part)
Offer: 1,275
1,200—2 1/2 ton 6x4 tractors with 7 ton semi-trailers
400 in first half
800 in second half
50—20 ton 6x4 tractors with Freuhaufer T-88 semi-trailers
with Gar Wood side dump bodies
25 in first half
25 in second half
25—20 ton 6x4 tractors with Freuhaufer T-88 semi-trailers
with Gar Wood end dump bodies
10 in first half
15 in second half
11,253 tons S.W.
U. S.
Ref. No.

II-4A1 Motorcycles
Request: 12,000
(I A&M 7)
Offer: 12,000 Solo—U. S. standard
6,969 in first half
5,031 in second half
3,150 tons S.W.

II-4B1 Tractors (artillery prime movers)
Request: 5,000—4,000 medium
1,000 heavy
Spare parts 20% of value of item
Offer: 2,400
7,920 tons S.W.
360 Class II Heavy in first half
840 Class III Medium in first half
360 Class II Heavy in second half
840 Class III Medium in second half

II-4B3 Engines for Tractors
Request: 4,000 GMC 4/71
(I A&M 6)
Offer: 2,000 GMC 4/71
450 in first half
1,550 in second half
2,746 tons S.W.

II-5A1 A.A. Guns, 90 mm
Request: 240
(I A&M 10)
Offer: 240 complete with searchlights and fire control equipment but not including electronic gun-laying sets in first half
192—M1A1
48—M2
4,207 tons S.W.

II-5H Ammunition
Request: 2,000 shells for each anti-aircraft gun
(I A&M 14)
4 sets for each tank
15 sets for each plane
Offer: Requests will be met in full except shells for 90 mm guns which can be supplied up to 1,650 rds. per gun
62,938 tons S.W.

II-5K Howitzer, 240 mm
Request: 2
(Supplementary)
Offer: 2—M1 on carriage M1—in second half
90 tons S.W.

II-5L Gun, 8”
Request: 2
(Supplementary)
Offer: 2—M1 on carriage M2—in second half
32 tons S.W.

Spare Parts for Ordnance Materiel
Spare parts will be furnished in all instances in accordance with U. S. Army standards
II-6A1 Smokeless Powder
Request: 89,985 tons
(I A&M 11 part)
Offer: 65,000 tons N.W.
30,000 tons 3 in.
15,000 tons in first half
15,000 tons in second half
26,000 tons 90 mm
13,000 tons in first half
13,000 tons in second half
9,000 tons .30 cal.
4,500 tons in first half
4,500 tons in second half

II-6A2 Stick Powder (solventless propelling)
Request: 7,500 tons
(I A&M 11 part)
Offer: 0

II-6B T.N.T.
Request: 65,000 tons
(I A&M 13)
Offer: 60,000 tons N.W.
30,000 tons in first half
30,000 tons in second half

II-6C Dynamite (Including Ammonite)
Offer: 11,808 tons N.W.
5,804 tons in first half
5,804 tons in second half

II-6F Detonators, Blasting Supplies, etc.
Offer: $3,248,000
$2,518,000 (62,630,000 ft.) blasting fuse in first half
$160,000 (6,415,000 ft. detonating cord) in first half
$270,000 (20,000,000 blasting caps) in first half

II-7A2 Radio Stations Over 1 KW
Request: 191
(I A&M 15—1)
Offer: 153
4—50 KW shortwave
1 in first half
3 in second half
30—15 KW
10 in first half
20 in second half
20—7.5 KW in second half
99—3 KW
39 in first half
60 in second half

20,000 tons S.W.
78,000 tons S.W.
68,400 tons S.W.
13,350 tons S.W.
691 tons S.W.
14,851 tons S.W.
II-7B2 Radio Stations I KW and under

Request: 12,100
(I A&M 5—2)
Offer: 12,100

1,000 SCR-399
600 in first half
400 in second half
4,000 SCR-284 in first half
3,300 SCR-274N, aircraft
1,300 in first half
2,000 in second half
200 SCR-177B
150 in first half
50 in second half
3,600 Pilot V-100B
600 in first half
3,000 in second half

7,409 tons S.W.

II-7C2 Radio Receivers

Request: 2,600
(I A&M 15—5)
Offer: 2,600

400—RCA DR-89
50 in first half
350 in second half
1,200—National HRO in second half
500—Federal 128-A in second half
500—SP-210-X or SCR-244 in second half

398 tons S. W.

II-7D1 Radio Locators—Marine

Request: 250
(I A&M 15—6 part)
Offer: Under study

II-7D2 Radio Locators—Ground

Request: 220
(I A&M 15—6)
Offer: 196 units

98 AN/TPS—3 (with IFF-AN/TPX-3) in first half
4* SCR 271 DA in first half
21* SCR 527 in first half
13* SCR 627 in first half
60 SCR 545 in first half

*Together with 15 filter centres AN/TTQ-1.

2,542 tons S.W.

II-7D3 Radio Locators, Aircraft

Request: 500
(I A&M 15—6 part)
Offer: Under study

II-7E Radio Direction Finders

Request: 277
(I A&M 15—4)
Offer: 200 SCR—551 with power supply SCR—169

195 in first half (40 delivered in Third Protocol)
5 in second half

720 tons S.W.
II-7F Radio Altimeters
Request: 2,000
(I A&M 15—7)
Offer: 300
50—SCR 718 in first half
250—AN/APN-1 in first half
Additional offering will be considered upon receipt of specifications.
12 tons S.W.

II-7G Radio Beacons
Request: 50
(I A&M 15—8)
Offer: Under study

II-7H Radio Tubes
Request: 5,000,000
(I A&M 15—9)
Offer: 5,000,000
2,500,000 in first half
2,500,000 in second half
Subject to availability of specific types.
518 tons S.W.

II-7I & J Radio Component Parts and Accessories and Radio Measuring and Testing Equipment
Request: $3,600,000
(I A&M 15—10)
Offer: $3,438,000
$1,000,000 in first half
$2,438,000 in second half
1,000 tons S.W.

II-7K Radio Compasses
Request: 1,200
(Supplementary)
Offer: 1,200
1,000 MN-26C in first half
200 SCR-269G in first half
35 tons S.W.

II-8A Road and Airport Construction Equipment
Request: 1,438 units ($7,368,500)
(I A&M 8 & 9 parts)
Offer: 760 units ($2,925,000)
200 units ($800,000) road rollers, gasoline engine driven, tandem 2 wheel, 5-8 ton, in second half
100 units ($565,000) road rollers, gasoline engine driven, 3 wheel 10 ton, in second half.
100 units ($350,000) road rollers, 3½-5 ton and/or 5-8 ton
50 in first half
50 in second half
60 units ($300,000) road rollers, gasoline, steam or diesel, 10 ton or over, new or reconditioned tandem, either 2 or 3 wheel.
30 in first half
30 in second half
6,140 tons S.W.
F O U R T H  P R O T O C O L

103

U. S. Ref. No.

100 units ($750,000) road graders, motorized (moldboard, 12') gasoline or diesel in second half.

200 units ($160,000) plow, snow, "V" type w/o trucks

150 in first half

50 in second half

II–8B Tractor Mounted Construction Equipment

Request: 208 ($2,404,000)

(I A&M 8 part)

Offer: 150 units ($1,605,000) tractors Class II with dozer

525 tons S.W.

25 in first half

125 in second half

II–8C Mixers and Pavers, Bituminous and Concrete

Request: 372 units ($2,594,000)

(I A&M 8)

Offer: 348 units ($1,994,000)

160 units ($896,000) distributor, bituminous material, trailer mounted, 1250 gallon.

40 in first half

120 in second half

12 units ($300,000) mixer, asphalt, self-propelled, gasoline or diesel engine driven, with spreader-finisher unit, Jaeger Model MP-2, in second half.

40 units ($100,000) heater, asphalt, trailer-mounted, 2 car, 28 H.P.

15 in first half

25 in second half

100 units ($81,000) spreader, aggregate, towed type, traction-powered, 8' width w/o truck, in second half

33 units ($594,000) mixer, asphalt, gasoline engine driven, semi-trailer mounted with pneumatic tires, 15-30 tons per hour, Barber-Green Model 841, in second half.

3 units ($23,000) finisher, asphalt, crawler-mounted, 12 ft., Barber-Green Model No. 879A, in second half.

II–9A1 Steam Locomotives, R. R.

Request: 1,564 ($139,360,000)

(III 1)

Offer: 1,585 ($139,010,000)

201,404 tons S.W.

1,499—2-10-0, 105 ton 60' ga. includes 99 units repossessed during Third Protocol period.

1,050 in first half

449 in second half

10—0-4-0 50 ton, 60' ga. in first half

76—0-6-0 70 ton, 60' ga.

20 in first half

56 in second half
II-9A2 Electric Locomotives, R. R.
Request: 50 ($12,500,000)
(III 2)
Offer: 50 ($12,500,000)
In accordance with the terms of paragraph "III" in Section V, "Machinery and Equipment". Financial assistance of the Lend-Lease Act will not be extended for this item.

II-9A3 Diesel-Electric Locomotives
Offer: 100 ($12,400,000) 127 ton 60" ga. old orders 12,000 tons S.W.
50 in first half
50 in second half

II-9B1 Flatcars, R. R.
Request: 14,549 ($36,372,500)
(III 3)
Offer: 12,244 ($30,610,000) 50 m. t. 60" ga. 279,163 tons S.W.
7,244 in first half
5,000 in second half

II-9B2 Dump Cars, R. R.
Request: 2,000 ($9,600,000)
(III 4)
Offer: 1,130 ($5,424,000) 20 cu. yd. 60" ga. 29,154 tons S.W.
630 in first half
500 in second half

II-9B4 Heavy Machinery Cars, R. R.
Offer: 35 ($280,000) 125 to 200 tons 60" ga., in first half 4,200 tons S.W.

II-10 Medical Supplies
Request: $17,500,000
(VII)
Offer: $17,500,000 maximum, provided Soviet requests are for quantities and items acceptable to the War Department and are fulfilled to the greatest extent possible from available standard U.S. Medical items.

Additional Military Supplies
Additional Military Supplies required for the U.S.S.R. war effort will be made available or placed in procurement as shipping conditions permit.

GROUP III.—Naval and Marine Supplies

III-1B Tankers
Request: 10—3,000 to 6,000 tons
(I N6)
Offer: Under consideration

III-1C Icebreakers
Request: 2—"NORTH WIND" type, 12,000 H.P.
(IN5)
Offer: 0
U. §.
Ref. No.

III–1D Tugboats
Request: 45
(I N7)
Offer: 35
15—800 H.P. (old orders)
20—143' steel tugs in accordance with U.S. Navy specifications and plans. These tugs are offered under the express condition that when and as they are completed, they may be retained by the Navy to fill urgent operational requirements.

III–1Di Complete Mechanical and Electrical Equipment for Tugboats
Offer: Undelivered portion of equipment for 3 tugboats ($206,000) (old orders only) 500 tons S.W.

III–1E Cable Ships
Request: 2
(1N10)
Offer: Under consideration

III–1G Pneumatic Pontoons
Request: 120—capacity 4 to 100 tons
Offer: 120
80—capacity 40 tons
40—capacity 100 tons 100 tons S.W.

III–1H Complete Mechanical and Electrical Equipment for Ferry Boats
Offer: For 6 boats (old orders) 30 tons S.W.

III–2A Submarine Chasers—110'
Request: 72
(I N1)
Offer: 23 (old orders)
Balance under study.

III–2B Submarine Chasers—65'
Offer: 17 (old orders) 800 tons S.W.

III–2C Torpedo Boats
Request: 130
(I N2)
Offer: 130
100 old orders of which 44 will be knocked down.
30—6 per month beginning in September (new orders) 9,260 tons S.W.

III–2D Minesweepers
Request: 30
Offer: 12 YMS—4 each month beginning in first quarter 1945

III–2D1 Trawling Equipment for Minesweepers
Request: 120 sets
(I N3 part)
Offer: 90 sets
20 old orders
70 new orders 2,960 tons S.W.
782148—47—8
III-2E Escort Vessels
Request: 20 with displacement of from 200 to 1,200 tons
(I N4)
Offer: Under study

III-2F Tenders
Request: 3—Boom tenders with carrying power of 25 to 30 tons
(I N8)
Offer: Under study

III-3A Marine Diesel Engines
Request: 3,804
Offer: 3,529
12—1,600 H. P. new orders (Tentative)
3—1,400 H. P. new orders (Tentative) from surplus
150—1,200 H. P.
50 old orders
100 new orders (Tentative)
45—650 H. P. old orders
1,142—101 to 500 H. P.
460 old orders
600 new orders limited to 125–400 to 500 H. P. and
60–300 to 399 H. P.
82 new orders from surplus
1,392—31 to 100 H. P.
564 old orders
625 new orders
203 new orders from surplus
785—9 to 30 H. P.
225 old orders
560 new orders

24,039 tons S.W.

III-3B Marine Gasoline Engines
Request: 1,943
(I N11 6 to 9)
Offer: 1,743
535—1,200 H.P. "Packard", old orders
50—650 H.P. H-S Defender, new orders
434—101 to 300 H.P.
34 old orders
400 new orders
724—13 to 100 H.P.
524 old orders
200 new orders

2,580 tons S.W.

III-3C Marine Wooden Gas Engines
Offer: 200 (old orders only)

80 tons S.W.

III-3D Outboard Motors
Request: 850
Offer: 850 new orders
300—22.5 quads.
450—9.7 quads.
100—5.4 quads.

90 tons S.W.
III–3E Shafting and Ship Propellers
Offer: $204,000 (old orders only) 165 tons S.W.

III–3F Steering Gears
Request: $784,000
Offer: $784,000
$284,000 old orders
$500,000 new orders consisting of 20 sets of electric steering engines with hand mechanisms for steering 260 tons S.W.

III–3G Storage Batteries for Submarines
Offer: 18 (old orders only) 1,590 tons S.W.

III–4A Salvage Stations and Diving Gear
Request: $670,000
Offer: $670,000
$170,000 old orders
$500,000 new orders to consist of 50 diving stations 1 C.M. per min. at 25 ATM and 50 diving stations 1 C.M. per hour at 15 ATM. 280 tons S.W.

III–4B Jetting Equipment
Request: $28,000
Offer: $28,000, 28 sets 20 tons S.W.

III–4E Distilling Apparatus
Request: $1,200,000
Offer: $1,200,000—3 units for 500 tons of boiler water a day 600 tons S.W.

III–4G Miscellaneous Special Ship Equipment
Request: $500,000
Offer: $500,000—426 Machine Telegraphs 325 tons S.W.

Additional Naval and Marine Supplies
Additional Naval and Marine Supplies required for the U.S.S.R. war effort will be made available or placed in procurement as shipping conditions permit.

GROUP IV.—Foodstuffs and Related Products
To be Made Available as Shipped

IV–1B Wheat Flour
Request: 280,000 tons
(VI–1, part)
Offer: 280,000 tons, N.W. 298,760 tons S.W.

IV–1C3 Other Basic Grain Mill Products
Request: 10,000 tons Semolina
(VI–1, part)
Offer: 10,000 tons, N.W. Semolina 10,500 tons S.W.
IV–1C4 Other Finished Cereals and Products
Request: 35,000 tons
(VI–1, part)
10,000 tons Rolled Oats
25,000 tons Rice
Offer: 25,000 tons N.W. Rice
10,000 tons Rolled Oats will be supplied by Canada.

26,500 tons S.W.

IV–1D Dried Peas and Beans
Request: 75,000 tons Dried Beans
(VI–1, part)
Offer: 75,000 tons, N.W. Dried Beans
80,025 tons S.W.

IV–1E1 Seeds
Request: 34,000 tons
(Supplementary)
Offer: 34,000 tons, N.W.
35,700 tons S.W.

IV–2A Sugar from the United States
Request: 350,000 tons from all sources
(VI–2)
Offer: 200,000 tons N.W.
(105,000 tons cube or tablet if possible)
206,200 tons S.W.

IV–2B Sugar from Other Sources
Request: Included in IV–2A
Offer: 150,000 tons N.W. granulated from Cuba
151,500 tons S.W.

IV–3A Canned Dehydrated Meat
Request: 12,000 tons
(VI–3, part)
Offer: 7,000 tons, N.W. Dehydrated Pork
9,100 tons S.W.

IV–3B & C Tushonka and other Canned Meat
Request: 408,000 tons
(VI–3, part)
Offer: 351,000 tons N.W.
330,000 tons Tushonka, bulk Pork Sausage, Luncheon Meat, and Pork Sausage
21,000 tons Bacon
428,220 tons S.W.

IV–4A & D Lard and other Animal Fats and Oils
Request: 150,000 tons
(VI–5, part)
Offer: 170,000 tons, N.W.
(Lard, tallow and oleo oil)
200,600 tons S.W.

IV–4B1 Fat Cuts
Request: 80,000 tons
(VI–5, part)
Offer: 100,000 tons N.W.
80,000 if shipped at the rate of 6,700 tons a month
20,000 if shipped prior to Nov. 1, 1944
130,000 tons S.W.
FOURTH PROTOCOL

U. S.
Ref. No.

IV-4B2 Smoked Meats, Except Meat Preparations
Request: 10,000 tons
(VI-4)
Offer: 10,000 tons N.W.
10,000 tons smoked ham and bacon

IV-4B3 Meat Preparations
Request: 10,000 tons
Offer: 10,000 tons
10,000 tons Smoked Hard Salami

IV-4C Butter, Butter Oil and Carter's Spread
Request: 90,000 tons
(VI-5, part)
Offer: 40,000 tons, N.W.

IV-5A1 Vegetable Oil in Bulk
Request: 181,000 tons
(VI-6, part)
Offer: 181,000 tons, N.W.
93,500 tons Soybean Oil
81,850 tons Linseed Oil
5,650 tons Sunflower Oil

IV-5B Shortening
Request: 22,000 tons
(VI-6, part)
Offer: 22,000 tons, N.W.

IV-5C Oleomargarine
Request: 22,000 tons
(VI-6, part)
Offer: 22,000 tons, N.W.

IV-6A Canned Milk
Request: 8,000 tons
(VI-7, part)
Offer: 15,000 tons, N.W. Condensed Milk

IV-6B Dried Milk
Request: 20,000 tons
(VI-7, part)
Offer: 35,000 tons N.W.
7,000 tons dried whole milk
28,000 tons non-fat dry milk solids

IV-6C Dried Eggs
Request: 40,000 tons
(VI-7, part)
Offer: 60,000 tons N.W.

IV-6D Cheese
Request: 10,000 tons
(VI-7, part)
Offer: 17,000 tons N.W.
12,000 tons natural
5,000 tons processed

13,000 tons S.W.

13,000 tons S.W.

49,652 tons S.W.

181,000 tons S.W.

liquid cargo in bulk

25,300 tons S.W.

26,180 tons S.W.

18,600 tons S.W.

39,200 tons S.W.

69,000 tons S.W.

20,910 tons S.W.
IV-6E Soya Flour and Grits
Request: 60,000 tons full-fat soya flour
(VI-7, part)
Offer: 60,000 tons N.W. full-fat soya flour
60,600 tons S.W.

IV-6F Fruit and Vegetable Pastes and Purees
Request: 6,000 tons
(VI-7, part)
Offer: 6,000 tons N.W. Tomato Paste
7,500 tons S.W.

IV-6G Concentrated Juices
Request: 2,000 tons
(VI-7, part)
Offer: 2,000 tons N.W.
1,400 tons Concentrated Orange Juice
500 tons Concentrated Lemon Juice
100 tons Concentrated Grapefruit Juice
2,280 tons S.W.

IV-6I Dried and Dehydrated Vegetables
(except Peas and Beans)
Request: 5,263 tons
(VI-7, part)
Offer: 5,263 tons N.W.
2,000 tons Dehydrated Onions
1,000 tons Dehydrated Garlic
2,000 tons Dehydrated Tomatoes
157 tons Dehydrated Potatoes
53 tons Dehydrated Cabbage,
53 tons Dehydrated Beets
7,368 tons S.W.

IV-6J Dried Soups
Request: 4,300 tons
(VI-7, part)
Offer: 4,300 tons N.W.
1,000 tons Dehydrated Tomato Soup
2,000 tons Dehydrated Soya Mix Soup
1,000 tons Dehydrated Vegetable Mix Soup
300 tons Dehydrated Chicken Noodle Soup
4,945 tons S.W.

IV-6K Concentrated Cereals
Request: 4,437 tons
(VI-7, part)
Offer: 4,437 tons N.W.
1,000 tons Oatmeal Cereal
3,000 tons Buckwheat and Oat Cereal
437 tons other Concentrated Cereals
5,413 tons S.W.

IV-8E Vitamins
Request: 608.5 tons
(Supplementary)
Offer: 608.5 tons N.W.
10 tril. USP units (55 tons) Fish oil over 200,000 units per gram
1,035 tons S.W.
FOURTH PROTOCOL

U.S.
Ref. No.
10 tril. USP units (110 tons) Fish oil under 200,000 units per gram
15 tons Thiamin (Aneurin, Vit. B1) 2.5 tons Riboflavin (Vit. B2)
100 tons Niacin (Nicotinic Acid)
1 ton Ergosterol
175 tons Ascorbic Acid
600 Mil (150 tons) Multi-vitamin tablets

IV-SF Yeast
Request: 1,200 tons
(Supplementary)
Offer: 600 tons N.W.
400 tons Bakers' dry action
200 tons Nutritional tablets

Additional Foodstuffs and Related Products
Offer: 30,000 tons dependent upon availability of specific 36,000 tons S.W., items

714 tons S.W.

GROUP V.—Machinery and Equipment

Requests of the U.S.S.R., listed below, total approximately $1,818,-168,000. This total includes $126,517,000 estimated as undelivered from old orders on June 30, 1944, $224,369,000 authorized under the terms of the Third Protocol for delivery during the Fourth Protocol period and $1,467,282,000 of new requests.

Offerings of the United States, listed below, total approximately $1,132,453,000. Where specific units are mentioned in the following offerings the estimated values are included for memorandum purposes only. Such equipment will be supplied in accordance with the units and types mentioned and the designs and specifications agreed upon by representatives of the two Governments. In all other instances deliveries will be made or orders considered for placement in production up to the actual values shown.

I. Offerings designated by the symbol "I" represent quantities of old orders undelivered from factories as of June 30, 1944, estimated at $126,517,000 and $223,229,000 of orders authorized during the Third Protocol period for delivery from factories during the Fourth Protocol period. Offerings in this class will be made available during the period of the Fourth Protocol.

II. In order to assist the U.S.S.R. in maintaining its production for the successful prosecution of the War, the United States will, from time to time during the Protocol period, consider placement of new orders in quantities not to exceed a total of $300,000,000. The quantities listed below and designated by the symbol "II", will be considered to the extent justified by the overall quantities in production. It is understood that, where feasible, such new orders
will be filled from items available from U.S. surpluses or from orders cancelled by other claimants whenever in the judgment of responsible U.S. authorities such items are comparable to those specified by the U.S.S.R., account always being taken of conditions peculiar to the U.S.S.R. which will affect the use of this equipment. It is also understood that where new orders are accepted at a time too far advanced in the Fourth Protocol year for delivery to be effected under the regular Protocol rating, before June 30, 1945, the U.S.S.R. will accept a delivery date after June 30, 1945. On the basis of a continuing review, the U.S. will, from time to time, inform the U.S.S.R. as to the extent to which it will consider new orders under this paragraph. Offerings under this paragraph are for supplies requiring a relatively short period of time to produce or to reproduce, if already constructed.

III. Items designated by the symbol "III" in the following schedules totalling approximately $481,807,000 represent supplies requested by the Union of Soviet Socialist Republics for its war production programs, which require a long period to produce, or to reproduce if already constructed, and have a long period of useful life. Items under this paragraph will not be financed under the Lend-Lease Act but may be purchased by the U.S.S.R. if it so elects. All items under this paragraph are also subject to the following conditions.

Conditions

1. Individual applications for such equipment will first be reviewed by appropriate U.S. Government agencies.

2. After approval of individual applications it will be necessary for the U.S.S.R. to complete arrangements under which patent or other property rights are protected to the satisfaction of their owners.

3. New production of equipment covered by this offer will not be undertaken whenever in the judgment of responsible U.S. authorities such equipment can be supplied from U.S. surpluses or from cancelled orders, account always being taken of conditions peculiar to the U.S.S.R. which will govern use of the equipment.

4. Approval for new production will be given only to the extent that equipment required for U.S. programs of comparable urgency is being approved and priority ratings, where required, will correspond to ratings granted such U.S. programs.

5. The U.S. will not undertake to effect delivery of the equipment during a fixed time period.
FOURTH PROTOCOL

U.S.
Ref. No.

V-1 Engines and Turbines, General Purpose
Request: $5,368,000
(IV 15)
Offer: I—$4,368,000
II—$1,000,000

V-2A Compressors (Air and Gases), Marine
Request: $4,375,000
Offer: II—$4,375,000—1,224 units

V-2B Compressors (Air and Gases), Other
Request: $34,868,000 (including Fan and Blower Equipment, Industrial)
(I-8 part and IV-7E)
Offer: I—$4,534,000
II—$4,100,000 including 100 skid-mounted gasoline engine driven 500 C.F.M. ($1,100,000) 10 to be made available in first half and 90 in second half.

See V-5B for Fan and Blower offering.

V-3A Pumps (Liquid), Marine
Request: $3,041,000
Offer: I—$1,168,000
II—$1,873,000—1,431 units

V-3B Pumps (Liquid), Other
Request: $28,571,000
(IV 7F)
Offer: I—$7,778,000
II—$1,000,000

V-4 Crushing, Pulverizing, Screening and Mixing Machinery and Equipment
Request: $140,948,000
(I A&M 8, II-28 and IV-7G including Mining and Quarrying Machinery, Earth and Rock Boring and Drilling Machinery and Accessories and Well and Blast Hole Drilling Machinery.)
Offer: I—$10,240,000 including V-49 Mining and Quarrying Machinery
II—$11,295,000 including V-49 Mining and Quarrying Machinery and 10-25 cu. yd. trailer-mounted Rock Crushers and Screening Plants ($335,000) to be made available in second half.
III—$2,500,000 one coal washing plant. Additional items are under study.

See V-50 and V-51 for offering of Earth and Rock Boring and Drilling Machinery and Well and Blast Hole Drilling Machinery.
V-5 Conveyors and Conveying Systems
Request: $13,927,000
(IV 7H including Mine Type Locomotives, Rail Cars and Parts, Industrial Trucks, Tractors, Trailers, Stackers and Accessories)
Offer: I—$1,114,000
1,454 tons S.W.
See V-6B, V-7 and V-59B for offerings of Mining Hoists, Industrial Trucks, Tractors, Trailers, Stackers and Accessories and Mine Type Locomotives, Cars and Parts.

V-6A Winches, etc., Marine
Request: $2,637,000
Offer: I—$97,000
II—$1,340,000—294 units
81 tons S.W.

V-6B Cranes, Derricks, Hoists and Winches, Other
Request: $98,323,000
(I N9, IV-7B, C, and D and $64,049,000 from IV-7H)
Offer: I—$16,973,000
$8,049,000 Mining Hoists
$8,924,000 Other Cranes, Derricks, Hoists and Winches.
II—$9,527,000
$451,000 Mining Hoists
$9,076,000 Other Cranes, Derricks, Hoists and Winches.
36,491 tons S.W.

V-7 Industrial Trucks, Tractors, Trailers, Stackers and Accessories
Request: See V-5
Offer: I—$788,000—155 units to be made available in first half.
II—$4,046,000—796 units
303 units to be made available in first half
493 units to be made available in second half
875 tons S.W.

V-8A Fan and Blower Equipment, Marine
Request: $66,000
Offer: I—$66,000
88 tons S.W.

V-8B Fan and Blower Equipment, Other
Request: See V-2B
Offer: I—$4,234,000
II—$3,500,000 not to include turbo-blowers for blast furnaces.
5,674 tons S.W.

III—Items under study.

V-9 Mechanical Power Transmission Equipment
Request: $572,000
(II—28 part)
Offer: II—$286,000 Roller chains
V-10 Bearings

Request: $27,337,000
Offer: I—$15,337,000
II—$2,000,000

5,752 tons S.W.

V-11 Valves and Steam Specialties

Request: $21,595,000
Offer: I—$4,195,000
II—$10,505,000

5,013 tons S.W.

V-12 Miscellaneous General Purpose Industrial Machinery and Equipment

Request: $2,720,000
Offer: I—$720,000
II—$2,000,000

608 tons S.W.

V-13A1 Electrical Rotating Equipment, Marine

Request: $1,772,000
Offer: I—$1,772,000

2,277 tons S.W.

V-13A2 Electrical Rotating Equipment, Excluding Generator Sets, Including Motor Generator Sets, Other

Request: $32,628,000
Offer: I—$9,128,000
II—$6,000,000 subject to types, sizes, and characteristics.

11,729 tons S.W.

V-13B1 Generator Sets, Military

Request: 17,500 units ($5,080,000)
Offer: II—2,500 units ($2,080,000)
500 ($750,000) 5 KW in second half
2,000 ($1,330,000) 1½ KW
500 in first half
1,500 in second half

2,567 tons S.W.

V-13B2 Generator Sets, Marine

Request: $6,758,000
Offer: I—$5,404,000
II—$1,354,000—691 units

V-13B3 Generator Sets, Other

Request: $286,407,000
Offer: I—$ 74,035,000
II— $34,484,000
III—$154,770,000 as follows:

Complete Stationary Steam Plants
4—100,000 KW plants with 2—50,000 KW units each.
1—50,000 KW plant with 1—50,000 KW unit.
4—50,000 KW plants with 2—25,000 KW units each.
8—6,000 KW plants with 1—6,000 KW unit each.

35,166 tons S.W.
Steam Turbines Only
2—50,000 KW units
23—25,000 KW units
12—12,000 KW units
15—6,000 KW units
14—3,000 KW units

Back Pressure Power Plants
9—1500 to 1650 KW units

Hydro-Electric Plants
1 plant of 9 units for Dneprostroi

Financial assistance of the Lend-Lease Act will be provided for the first three (3) units of this nine unit project. The remaining 6 units, although programmed together with those financed under the Lend-Lease Act, must be obtained with other resources.

1 37,000 KW plant with 2—18,500 KW units
1 11,000 KW plant with 1—11,000 KW unit
1 75,000 KW plant with 2—37,500 KW units
1 96,000 KW plant with 4—24,000 KW units
1 48,000 KW plant with 2—24,000 KW units
1 24,000 KW plant with 1—24,000 KW unit

V-14 Primary Electric Power Transmission and Distribution Equipment
Request: $42,653,000 including secondary Distribution Equipment and wiring devices
Offer: I—$4,771,000 include V-16 A+B
II—$10,276,000 include V-16 A+B 2,338 tons S.W.

V-15 Power Conversion Equipment
(Non-rotating rectifiers)
Request: $9,744,000
(IV-3 part)
Offer: I—$1,073,000
II—$5,000,000 525 tons S.W.

V-16A Secondary Electric Distribution Equipment and Wiring Devices, Marine
See V-14

V-16B Secondary Electric Distribution Equipment and Wiring Devices, Other
Request: See V-14
Offer: See V-14

V-17 Motor Starters and Controllers
Request: $15,300,000
(IV 3, part)
Offer: I—$1,957,000
II—$2,843,000 1,810 tons S.W.
FOURTH PROTOCOL

V-19 Miscellaneous Electrical Equipment
Request: $600,000
(IV-15)
Offer: I—$321,000
II—$279,000 includes 40 metal finding detectors $100,000
297 tons S.W.

V-20 Food Products Machinery
Request: $22,276,000
(IV 7 M and 13)
Offer: I—$ 224,000
II—$1,700,000 (equipment for existing plants only)
III—$5,000,000 as follows:
26 complete vegetable dehydration plants
4 complete spray process drying plants
20 presses for briquetting dry vegetables
3 complete vacuum installations with vacuum pans
2 continuous automatic potato chip and Julienne ma-
chinery (Financial assistance of the Lend-Lease Act
will not be extended for this item.)
5 lines for drying and processing vegetables and fruits.
Additional items under study.
47 tons S.W.

V-21 Textile Industries Machinery
Request: $6,913,000
(IV 7 M)
Offer: I—$13,000
II—0
III—Under study
6 tons S.W.

V-22 Pulp and Paper Industry Machinery
Request: $6,000
Offer: I—$6,000
10 tons S.W.

V-23 Printing Trades Machinery and Equipment
Request: $150,000
(IV 7M)
Offer: I—$ 7,000
II—$100,000 Additional quantities under study.
6 tons S.W.

V-25 Woodworking Machinery
Request: $3,309,000
(IV 7M)
Offer: I—$309,000
II—$1,000,000
III—Items under study
405 tons S.W.

V-26 Metal Melting and Heating Furnaces
Request: $12,640,000
(IV 5)
Offer: I—$5,140,000
II—$2,860,000
5,474 tons S.W.
V-27 Roasting, Sintering, Blast and Reverberatory Furnaces

Request: $34,743,000

Offer: I—$4,743,000
II—
III—$30,000,000 as follows:
   Equipment for 8 blast furnaces 42 air and gas blowers
   Equipment for 20 open-hearth furnaces
   4 Bessemer converters
   2 Bessemer mixers
   8 units ore sintering equipment
Miscellaneous Equipment for production of non-ferrous
metal miscellaneous by-product, refinery and tar
distillation equipment

4,956 tons S.W.

V-28 Foundry Equipment

Request: $2,594,000

Offer: I—$1,544,000
II—$1,000,000

1,536 tons S.W.

V-29 Special Industry Furnaces, Kilns and Ovens

Request: $12,027,000

Offer: I—$2,027,000
II—
III—$10,000,000 Equipment for ten coke oven bat-
teries.

3,314 tons S.W.

V-30A Petroleum Refinery Plants

Request: $39,000,000

Offer: I—$29,000,000 Specific items ordered prior to 105,162 tons S.W.
       June 30, 1944
II—
III—Items under study

V-30B Petroleum Refinery Machinery and Equipment

Request: $25,000

Offer: I—$25,000

28 tons S.W.

V-31 Special Machinery for the Glass Industry

Request: $9,357,000

Offer: I—$1,357,000
II—
III—$8,000,000—one continuous plate glass manu-
factoring plant (Financial assistance of the
Lend-Lease Act will not be extended for this
item)

2,042 tons S.W.
FOURTH PROTOCOL

V-32 Special Machinery for Chemical Manufacturing Industry

Request: $79,901,000

(IV 6A through C and F through F)

Offer:

I—$1,011,000

II—$1,500,000 equipment for existing plants only

III—$90,090,000 as follows:

- 2 complete plants for production of nitric acid ($34,000,000)
- 1 complete plant for production of synthetic ammonia ($3,500,000)
- 1 complete plant for production of synthetic phenol ($4,500,000)
- 2 complete plants for production of synthetic acetone and butyl alcohol ($3,000,000)
- 1 complete plant for production of ethyl alcohol ($5,000,000)
- 1 complete plant for production of styrene ($5,000,000)
- 1 complete plant for production of acetic acid (glacial) ($250,000)
- 1 complete plant for production of glucose ($500,000)
- 1 complete coke benzol plant ($800,000)
- 1 complete plant for production of asphalt roofing ($700,000)
- 1 complete plant for production of urea ($700,000)
- 1 complete plant for production of electrolytic hydrogen ($90,000)
- 1 complete plant for the regeneration of sulfuric acid ($500,000)
- 1 complete installation for production of cellulose acetate ($1,350,000)
- 1 complete installation for production of synthetic varnish ($500,000)
- 1 complete installation for production of synthetic soap detergent ($2,000,000)
- 1 complete installation for production of chlorine by the electrolytic method ($500,000)
- 1 complete plant for production of catalysts for cumene process ($200,000)
- 1 complete plant for production of catalyst for hydrogenation process ($400,000)
- Hydro-stabilization units for hydrogen plants ($400,000) (Girbitol units)
- 1 plant for production of Butadiene by Houdry method ($7,000,000) capacity 15,000 tons a year

1,521 tons S.W.
2 plants for the production of synthetic rubber (neoprene) ($15,000,000) capacity 10,000 tons a year for one plant and 15,000 tons a year for the second. The installation will include facilities for manufacturing hydrochloric acid and acetylene.

1 installation for the production of phthalic anhydride ($700,000) 3,000 tons a year capacity

1 plant for the production of Houdry catalysts ($500,000) capacity to be adequate to meet requirements of four Houdry units in operation in U.S.S.R. or presently being produced in the U.S.A. for use in the U.S.S.R.

Raw Film and Paper producing equipment ($3,000,000). Financial assistance of the Lend-Lease Act will not be extended for this item.

V–33 Gas Generating, Conditioning and Other Gas Producing Apparatus

Request: $21,398,000
(I N13D and IV 6S)
Offer: I—$6,548,000

II—$11,540,000 units with capacity up to and including 100 CM per hour.

III—$3,310,000 2 units—3500 to 5000 CM per hour capacity.

V–34A Miscellaneous Special Industry Machines

Request: $78,747,000
(IV 6Q)
Offer: I—$997,000

II—$1,500,000 equipment for existing radio tube manufacturing plants only.

III—$76,250,000 as follows:

4 plants for production of roofing and wall tile ($2,400,000)^1
5 plants for production of piping ($3,000,000)^1
2 plants for production of roofing and facing tile ($1,600,000)^1
5 plants for production of sheets and planks for interior finish ($3,500,000)^1

^1 Financial assistance of the Lend-Lease Act will not be extended to those items.
13 plants for production of loose and rolled wool and insulating cork for piping ($5,850,000)\(^1\)

1 plant for production of floor tile and linoleum ($600,000)\(^1\)

1 plant for production of rolls and shingles ($1,250,000)\(^1\)

3 plants for production of gypsum for making gypsum parts ($600,000)\(^1\)

1 plant for production of wall blocks ($200,000)\(^1\)

18 plants for production of plywood 2 to 55 mm thick ($12,600,000)\(^1\)

18 plants for production of windows, doors, sashes, wood flooring and other details for housing construction ($6,300,000)\(^1\)

5 plants for production of insulating board or panel ($3,250,000)\(^1\)

2 plants for production of ceramic hollow tile and roofing tile ($1,600,000)\(^1\)

2 plants for production of toilet bowls, lavatories, kitchen sinks, facing and tile ($1,600,000)\(^1\)

33 plants for production of slag and cinder blocks ($4,950,000)\(^1\)

3 plants for production of metal structures for bridges and industrial buildings ($7,500,000)\(^1\)

3 plants for production of toilet bowls, kitchen ranges, lavatories, kitchen sinks, etc. ($2,400,000)\(^1\)

2 plants for production of builders' hardware ($2,000,000)\(^1\)

Equipment for manufacturing of radio tubes ($14,500,000)

1 shop for repair of precision instruments ($550,000)

---

**V-35 Machine Tools**

Request: $265,000,000

(IV 1)

Offer: I—$30,000,000  
II—$90,000,000  
18,750 tons S.W.

---

\(^1\) Financial assistance of the Lend-Lease Act will not be extended to these items.
V-36 Rolling Mills and Auxiliary Equipment
Request: $92,172,000
(IV 2)
Offer: I—$12,172,000
II—0
III—$80,000,000 as follows:
   2—40” Blooming mills
   1—40” Bloom mill with 28”–32” continuous billet mill
   1—26” Bar and structural mill
   1—14”–10” Merchant mill
   1—28/32” Bar mill
   1—72” Plate mill
   1—Shape mill
   5—Small strip stands
   1—Steiffel mill 3”–8½”
   2—Steiffel mill 5”–14”
   15—Tube reducing machines

20,510 tons S.W.

V-37 Drawing Machines
Request: $1,950,000
(IV 15)
Offer: I—$950,000
II—$1,000,000

921 tons S.W.

V-39 Secondary Metal Forming and Cutting Machinery and Equipment
Request: $85,528,000
(IV 2)
Offer: I—$15,500,000
II—$3,500,000
III—$1,270,000 as follows:
   1—8,000 ton bending press
   1—4,500 ton flanging press
   1—1,500 ton straightening press
   Additional items under study.

23,405 tons S.W.

V-40A Welding Machinery—Marine
Request: $10,000
Offer: II—$10,000

V-40B Welding Machinery—Other
Request: $17,483,000
(IV 71)
Offer: I—$4,583,000
II—$3,000,000

3,804 tons S.W.

V-41 Testing and Measuring Machines (Metal-working)
Request: $3,735,000
(IV 8)
Offer: I—$1,835,000
II—$665,000

808 tons S.W.
V-43A Portable Metalworking Machines and Tools (Power Driven—Marine Underwater Types)
Request: $943,000
Offer: I—$143,000
II—$800,000
70 tons S.W.

V-43B Portable Metalworking Machines and Tools (Power Driven), Other
Request: $1,250,000
Offer: I—$477,000
II—$733,000
236 tons S.W.

V-44A Cemented Carbide Cutting Tools for Machine Tools
Request: $5,350,000
Offer: I—$1,350,000
II—$1,050,000
115 tons S.W.

V-44B Metal Cutting Tools—Including Threading Tools and Metal Cutting Hack and Band Saw Blades, Hand and Machine Operated
Request: $27,462,000
Offer: I—$10,962,000
II—$4,038,000
2,631 tons S.W.

V-45 Cutting and Forming Tools for Metal Forming Machines
Request: $13,000
Offer: I—$13,000
3 tons S.W.

V-46 Attachments and Accessories for Machine Tools
Request: $3,598,000
Offer: I—$2,348,000
II—$1,250,000
1,621 tons S.W.

V-46 Tool Room Specialties and Attachments and Accessories for Other Metal Working Tools
Request: $4,000
Offer: I—$4,000
3 tons S.W.

V-48 Agricultural Machinery and Implements Except Tractors
Request: $190,000
Offer: I—$190,000
360 tons S.W.

V-49 Mining and Quarrying Equipment
Request: See V-4
Offer: See V-4

V-50 Earth and Rock Boring and Drilling Machinery and Accessories
Request: See V-4
Offer: I—$2,013,000
II—$156,000—260 tons drill rods and couplings
2,939 tons S.W.
V-51 Well and Blast Hole Drilling Machinery
Request: See V-4
Offer: I—$2,180,000

V-52A Excavating and Dredging Machinery and Equipment
Request: $32,128,000
(IV-7A and I-8 part)
Offer: I—$9,818,000

II—$4,872,000—398 units as follows:

200 Crawler Shovels and Cranes ($4,219,000)
  104 Class 3 ($1,768,000)
    50 in first half
    54 in second half
  21 Class 4 ($441,000)
    10 in first half
    11 in second half
  15 Class 5 ($720,000)
    5 in first half
    10 in second half
  30 Class 11, Mobile ($660,000)
    10 in first half
    20 in second half
  30 Class 12, Mobile ($630,000)
    10 in first half
    20 in second half

100 Hammers, pneumatic or steam pile driver, double acting, 5,000 lbs. ($146,000)
  10 in first half
  90 in second half

78 Road Scrapers, towed type, cable operated, 8 cu. yds. type III without tractor ($335,000)
  28 in first half
  50 in second half

20 Ditching Machines, crawler mounted gasoline engine driven ($172,000)
  10 wheel type, digging depth 5' 6'' width 23'' ($72,000) in second half
  10 ladder type, digging depth 8' width 18'' to 24'' ($100,000) in second half

V-53 Miscellaneous Construction Equipment
Request: $1,200,000
(IV-7M)
Offer: II—$800,000

V-55 Miscellaneous Machinery
Request: $255,000
Offer: I—$255,000

265 tons S.W.
FOURTH PROTOCOL

V-58B Teletype Apparatus
Request: $2,383,000
(I A & M 16)
Offer: I—$888,000
II—$1,308,000
I and II include equipment valued at ($2,058,000) as follows:
550 teletypewriters Model 15 ($605,000) in second half
300 teletypewriters Model 19 ($600,000) in second half
400 telegraph printer sets EE-97 ($540,000)
185 in first half
215 in second half
High speed keying equipment ($313,000) in second half

225 tons S.W.

V-58C1 Field Telephones
Request: 100,000 ($5,000,000)
(I A and M17)
Offer: II—100,000 ($5,000,000) EE8 Soviet type
30,000 in first half
70,000 in second half

4,422 tons S.W.

V-58C2 Other Telephone and Telegraph Equipment
Request: $15,651,000
(I A and M19, 20 and 21)
Offer: I—$9,211,000
II—$1,110,000 as follows:
300 telephone central office sets TC-4 ($360,000)
150 in first half
150 in second half
20 3-channel telephone carrier package C with power units PE-95 ($750,000) in second half

V-58D Sound Equipment (Public Address, Recording and Reproducing)
Request: $43,000
Offer: I—$43,000

21 tons S.W.

V-58E Automatic Block Signal System
Request: $12,809,000
(IV-7L)
Offer: I—$2,809,000
II—$0
III—$10,000,000 as follows:
1,600 KM double-track steam road floating charge system with conventional track circuits and wire line circuits
200 KM double-track steam road coded track circuits without line wire
340 KM double-track electric traction road, A.C. signalling

980 tons S.W.

752148—47——10
V-59A Industrial Type Locomotives, Cars and Parts
Request: $6,293,000
(IV-7H)
Offer: I—$3,293,000 including 116 units ($677,000) as 4,973 tons S.W.
follows:
16 steam locomotives ($512,000) 27 ton,
0-8-0, 750 mm. ga. in first half
50 dump cars ($90,000) 20 ton 750 mm. ga. in
first half
50 flat cars ($75,000) 12 ton 750 mm. ga. in
first half

V-59B Mine Type Locomotives, Rail Cars and Parts
Request: See V-5
Offer: I—$885,000
II—$975,000 (not to include locomotives) 2,673 tons S.W.

V-60 Passenger Vehicles and Parts
Request: $190,000
Offer: I—$65,000
II—$125,000
200 Chevrolets in first half

V-61 Air Conditioning and Refrigeration Equipment
Request: $1,005,000
Offer: I—$12,000
II—$993,000 as follows:
80 ice plants, 1 ton ($117,000)
50 in first half
30 in second half
95 ice plants, 3.6 ton ($293,000)
65 in first half
30 in second half
50 prefabricated refrigerating warehouses,
(620 cu. ft.) ($90,000) in first half
100 refrigerated semi-trailers ($493,000)
50 in first half
50 in second half

V-62A Lighting Fixtures—Marine
Request: $748,000
Offer: I—$644,000
II—$2,000—50 navigation sidelights 209 tons S.W.

V-62B Lighting Fixtures—Other
Request: $1,094,000
Offer: I—$94,000
II—$1,000,000—Studio lighting equipment. Financial assistance of the Lend-Lease Act will
be not extended for this item.
V-63 Photographic Equipment
Request: $6,036,000
(IV-7M)
Offer: I—$36,000
III—$3,500,000—Sound recording equipment, motion picture cameras and accessories, film processing equipment, cutting equipment, and projection equipment. Financial assistance of the Lend-Lease Act will not be extended for this item.

V-64A Optical, Indicating, Recording and Control Instruments Except Radio and Radar Test Equipment, Aircraft Engine and Flight Instruments and Nautical and Navigation Instruments and Apparatus
Request: $11,089,000
(IV-8 part)
Offer: I—$2,035,000
II—$2,965,000—not to exceed 20% electrical equipment.
III—$ 500,000—Control and Measuring equipment for motion picture production. Financial assistance of the Lend-Lease Act will not be extended for this item.

V-64B Navigation Instruments
Request: $3,006,000
Offer: I—$ 6,000
II—$3,000,000

10 tons S.W.

V-65 Professional and Scientific Instruments Except Dental, Medical, Surgical, Operating Room Equipment, Other Hospital Equipment and X-Ray Equipment, Medical and Dental
Request: $1,585,000
(IV 8 part)
Offer: I—$928,000
II—$500,000

743 tons S.W.

V-67 Hand Tools, Non-Powered Except Dies, Taps, Hack and Band Saw Blades
Request: $867,000
Offer: I—$867,000

5 tons S.W.

V-68 Mechanics' Measuring Tools
Request: $8,037,000
(IV 9)
Offer: I—$3,032,000
II—$ 218,000

286 tons S.W.

V-69A Boilers, Marine
Request: $168,000
Offer: I—$81,000
II—$87,000—25 units

12 tons S.W.
U.S. Ref. No.

V-69B Power Boilers, Other
Request: 16,394,000

(I V 3 part)
Offer: I—$7,000,000
II—$2,940,000
III—$5,617,000

V-70 Agricultural Tractors Except Track-Laying
Request: 9,375,000 (5,000 Diesel track-laying) (Supplementary)
Offer: II—$5,000,000—5,000 steel wheel, equipped to burn kerosene or distillate in models and sizes available from U.S. production.

Other Machinery and Equipment
Request: $50,798,000

(I V 15 balance)
Offer: II—$25,000,000 representing additional offerings in categories for which no specific offerings are shown above or increases in specific offerings where such offerings are found to be inadequate to meet urgent unforeseen requirements.

Estimated Shipping Weight of Offerings Designated "II" Above Expected to Become Available During the Protocol Period

131,941 tons S.W.

GROUP VI.—Other Materials and Products

VI-1 Steel
Request: 951,486 tons including 50,000 tons requested of Canada

(II-16 to 27 incl. and II-28 part)
Offer: 860,421.5 tons N.W. as follows:

877,300 tons S.W.

| VI-1-10 | 24,000 tons | Copper Clad Strip |
| VI-1-16A | 140 tons² | Polished Drill Rods, plain carbon |
| VI-1-16B | 140 tons² | Polished Drill Rods, high speed alloy |
| VI-1-16C | 200 tons² | Polished Drill Rods, plain alloy |
| VI-1-17 | 6,700 tons² | High Speed Tool Steel, alloy |
| VI-1-18A | 6,280 tons² | Tool Steel, plain carbon |
| VI-1-18B | 1,000 tons² | Tool Steel, alloy X-12 |
| VI-1-18C | 1,500 tons² | Tool Steel, alloy X-12M |
| VI-1-18D | 9,500 tons² | Tool Steel, other alloy |
| VI-1-19E | 10,000 tons² | Cold Finished Bars, electric and BOH alloy |
| VI-1-19F | 43,000 tons | Cold Finished Bars, SAE 1015-1050 and other plain carbon |
| VI-1-20 | 70,000 tons² | H.R. Alloy Bars and Plates |
| VI-1-21 | 15,000 tons² | Cr-Si-Mn Billets (alloy) |
| VI-1-22 | 17,000 tons | Cold Rolled Sheets, carbon |
| VI-1-22A | 9,000 tons | Cold Rolled Strip, carbon |
| VI-1-23A | 3,000 tons³ | Stainless Steel Sheets and Plates |

² To be reduced by quantities supplied by the United Kingdom and Canada.
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI-1-23C</td>
<td>1,000 tons</td>
<td>Stainless Steel Bars</td>
</tr>
<tr>
<td>VI-1-24</td>
<td>50,000 tons</td>
<td>Tinplate, carbon</td>
</tr>
<tr>
<td>VI-1-25A</td>
<td>700 tons</td>
<td>Ball Wire, alloy</td>
</tr>
<tr>
<td>VI-1-25B</td>
<td>800 tons</td>
<td>Chrome Vanadium Wire (alloy)</td>
</tr>
<tr>
<td>VI-1-25C</td>
<td>300 tons</td>
<td>Alloy Wire 4140</td>
</tr>
<tr>
<td>VI-1-25D</td>
<td>200 tons</td>
<td>Music Wire, carbon</td>
</tr>
<tr>
<td>VI-1-25E</td>
<td>1,300 tons</td>
<td>Spring Wire, carbon</td>
</tr>
<tr>
<td>VI-1-25F</td>
<td>2,000 tons</td>
<td>Rope Wire, carbon</td>
</tr>
<tr>
<td>VI-1-25G</td>
<td>200 tons</td>
<td>Card Wire, carbon</td>
</tr>
<tr>
<td>VI-1-25I</td>
<td>15,000 tons</td>
<td>Galvanized Tel. and Tel. Wire</td>
</tr>
<tr>
<td>VI-1-25J</td>
<td>10,700 tons</td>
<td>Low Carbon Wire</td>
</tr>
<tr>
<td>VI-1-25K</td>
<td>100 tons</td>
<td>Square Wire, carbon</td>
</tr>
<tr>
<td>VI-1-25M</td>
<td>2,000 tons</td>
<td>Miscellaneous Carbon Wire</td>
</tr>
<tr>
<td>VI-1-26A</td>
<td>10,000 tons</td>
<td>Wire Rope</td>
</tr>
<tr>
<td>VI-1-27A</td>
<td>1,950 tons</td>
<td>Alloyed Tubes 18% Cr.-8% Nickel</td>
</tr>
</tbody>
</table>

Subject to receipt of satisfactory specifications and in addition to undelivered balances as of June 30, 1944, of stainless tubing and hot rolled ball bearing tubing.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI-1-27B</td>
<td>7,000 tons</td>
<td>Alloyed Tubes, 4-6% Cr.</td>
</tr>
<tr>
<td>VI-1-27C</td>
<td>4,360 tons</td>
<td>Alloyed Tubes, carbon 5% Molybdenum, pipe size</td>
</tr>
<tr>
<td>VI-1-27E</td>
<td>2,200 tons</td>
<td>Steel Alloyed Tubes, carbon 5%, H.R. tubes</td>
</tr>
<tr>
<td>VI-1-27F</td>
<td>4,500 tons</td>
<td>H. R. Ball Bearing Tubes, alloy</td>
</tr>
</tbody>
</table>

In addition to undelivered balances as of June 30, 1944, of stainless tubing and hot rolled ball bearing tubing.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI-1-28</td>
<td>2,000 tons</td>
<td>Stainless Steel Wire</td>
</tr>
<tr>
<td>VI-1-29</td>
<td>1,000 tons</td>
<td>Special Alloy Steel Wire</td>
</tr>
<tr>
<td>VI-1-32B</td>
<td>1,000 tons</td>
<td>Seamless Press. and Mech. Tubing, Carbon</td>
</tr>
<tr>
<td>VI-1-32C</td>
<td>4,000 tons</td>
<td>C.D. Press. and Mech. Tubing, carbon</td>
</tr>
<tr>
<td>VI-1-32D</td>
<td>10,000 tons</td>
<td>Hot Finished Press. and Mech. Tubing, carbon</td>
</tr>
<tr>
<td>VI-1-32F</td>
<td>15,000 tons</td>
<td>Electrical Weld Line Pipe, carbon</td>
</tr>
<tr>
<td>VI-1-32G</td>
<td>20,000 tons</td>
<td>Seamless and Electric Weld Casing, carbon</td>
</tr>
<tr>
<td>VI-1-32H</td>
<td>12,000 tons</td>
<td>Seamless and Electric Weld Line Pipe, carbon</td>
</tr>
<tr>
<td>VI-1-32I</td>
<td>6,600 tons</td>
<td>Seamless Drill Pipe, carbon</td>
</tr>
<tr>
<td>VI-1-32J</td>
<td>5,000 tons</td>
<td>Seamless and Electric Weld Oil Well Tubing, carbon</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI-1-32K</td>
<td>1,751.5 tons</td>
<td>Tool Joints</td>
</tr>
<tr>
<td>VI-1-33A</td>
<td>40,000 tons</td>
<td>H. R. Sheets, carbon</td>
</tr>
<tr>
<td>VI-1-33B</td>
<td>16,000 tons</td>
<td>H. R. Galvanized Roofing Sheets, carbon</td>
</tr>
<tr>
<td>VI-1-33C</td>
<td>20,000 tons</td>
<td>H. R. Plates, carbon</td>
</tr>
<tr>
<td>VI-1-33D</td>
<td>8,000 tons</td>
<td>H. R. Bars and Bar Mill Shapes, carbon</td>
</tr>
<tr>
<td>VI-1-33E</td>
<td>30,000 tons</td>
<td>H. R. Structural Shapes, carbon</td>
</tr>
<tr>
<td>VI-1-33F</td>
<td>6,000 tons</td>
<td>H. R. Hoop and Strip, carbon</td>
</tr>
<tr>
<td>VI-1-33G</td>
<td>5,000 tons</td>
<td>H. R. Terne Plate and Long Ternes, carbon</td>
</tr>
<tr>
<td>VI-1-34</td>
<td>6,000 tons</td>
<td>Wire Nails and Tacks</td>
</tr>
<tr>
<td>VI-1-101A&amp;B</td>
<td>300,000 tons</td>
<td>R. R. Rails and Accessories</td>
</tr>
</tbody>
</table>

Additional quantities will be supplied by other parties to the Protocol.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI-1-104</td>
<td>20,000 tons</td>
<td>Locomotive Car Wheel Tires</td>
</tr>
</tbody>
</table>

*To be reduced by quantities supplied by the United Kingdom and Canada.*
VI-2D Ferro-Vanadium

Request: 1,200 tons
(II 13)
Offer: 200 tons N.W. 214 tons S.W.

Other Parties to the Protocol will supply the balance.

VI-2E Ferro-Tungsten

Request: 1,500 tons
(II 15)
Offer: 560 tons N. W. 571 tons S.W.

Other parties to the Protocol will supply the balance.

VI-2F Ferro-Molybdenum

Request: 1,200 tons
(II 14)
Offer: 1,200 tons N.W. 1,284 tons S.W.

Copper Contained

Request: 150,000 tons
(II 6)
Offer: As contained in offerings under VI-3A1, A2, A3, and A4 below.

VI-3A1 Electrolytic Copper

Request: 60,000 tons
(II 6)
Offer: 0
Will be supplied by other parties to the Protocol.

VI-3A2 Copper Tubes, Etc.

Request: 5,000 tons
(II 8)
Offer: 5,000 tons N.W. 5,750 tons S.W.

VI-3A3 Copper Base Alloys

Request: 80,000 tons
(II 9)
Offer: 80,000 tons N.W. 82,400 tons S.W.

VI-3A4 Bare Copper Cable and Wire

Request: 20,000 tons
(II 10)
Offer: 19,000 tons N.W. (copper content) 19,190 tons S.W.

VI-3B Aluminum—All Shapes

Request: 87,200 tons (17,200 tons from request on Canada)
(II 1)
Offer: 87,200 tons N.W. 88,950 tons S.W.

Additional quantities will be supplied by other parties to the Protocol.

VI-3C Magnesium Metal

Request: 4,000 tons
(II 4)
Offer: 4,000 tons N.W. 4,000 tons S.W.
FOURTH PROTOCOL

U.S. Ref. No.

Nickel Contained in Products
Request: 2,000 tons
(II 3 part)
Offer: 2,000 tons N.W. maximum
As contained in Steel VI-1 and other products containing nickel.

VI-3D1 Pig Nickel
Request: 11,000 tons
(II 3)
Offer: 5,480 tons N.W. 5,754 tons S.W.

VI-3D3&4 Resistance Wire and Strip (Nickel Chromium)
Request: 600 tons
(II 11)
Offer: 538 tons N.W. 600 tons S.W.

VI-3D5&6 Nickel Foil and Other Pure Nickel Shapes
Offer: 28 tons N.W. (old orders only) 35 tons S.W.

VI-3E1 Tin
Offer: 5 tons N.W. (old orders only) 1 ton S.W.

VI-3F Zinc
Request: 10,000 tons
(II 7)
Offer: 0
Will be supplied by other parties to the Protocol.

VI-3G Lead
Request: 20,000 tons (from request upon U.K. and Canada)
Offer: 20,000 tons N.W. 21,000 tons S.W.

VI-3H1 Cadmium
Request: 224 tons (from request upon Canada)
Offer: 224 tons N.W. 235 tons S.W.

VI-3H3 Cobalt
Request: 180 tons
(II 2)
Offer: 90 tons N.W. 95 tons S.W.
Additional quantities to be supplied by other parties to the Protocol.

VI-4A Molybdenum Concentrates
Request: 4,480 tons
(II 5)
Offer: 4,480 tons N.W. 4,794 tons S.W.

VI-6A1 Marine Cable
Request: 1,200 km.
(I A & M 24)
Offer: See VI-6A4

VI-6A2 Submarine Cable
Request: 600 km.
(I A&M 23)
Offer: See VI-6A4
VI-6A3 Field Telephone Wire
Request: 250,000 miles
(I A&M 18)
Offer: 186,000 miles WS-1/TS
Delivery schedule not yet available.
12,830 tons S.W.

VI-6A4 Other Insulated Wire and Cable
Request: 4,000 km.
(IV 14)
Offer: "Marine Cable," VI-6A1, "Submarine Cable," 80,000 tons S.W.
VI-6A2, and "Other Insulated Wire and Cable," VI-6A4, containing 12,000 tons N.W. of copper

VI-6A5 Copper Magnet Wire
Request: See VI-6G
Offer: See VI-6G

VI-6B1 Wire Cloth and Screen
Offer: $385,000 (old orders only)
193 tons S.W.

VI-6B2 Wire Netting and Fencing
Request: 450 tons
(II 28)
Offer: 450 tons N.W.
508 tons S.W.

VI-6C Fabricated Structural Iron and Steel
Offer: 1,237 tons (old orders only)
1,237 tons S.W.

VI-6D Chains and Attachments
Request: 4,280 tons
(II 28)
Offer: 4,280 tons N.W.
4,280 tons S.W.

VI-6E Bolts, Nuts, Screws, Washers, Rivets
Request: 8,000 tons
(II 28)
Offer: 8,000 tons N.W.
8,320 tons S.W.

VI-6F Other Fabricated Metal Basic Products
Request: 200 tons shoe nails
(II 28)
Offer: $26,500 from old orders and 200 tons N.W. shoe nails. See offer for "Other Materials, including Metals and their Products"
232 tons S.W.

VI-6G Special Fine Wires, Strip, etc.
Request: 600 tons
(II 12)
Offer: Consideration will be given to the supply of 336 tons (including copper magnet wire VI-6A5) subject to acceptable specifications and arrangement of production schedules
386 tons S.W.

VI-6H Sucker Rods
Request: 4,000 tons
(II 28)
Offer: 4,600 tons N.W.
5,080 tons S.W.
VI-7A Anchors
Request: 1,002 tons
(I.I. 28)
Offer: 1,002 tons N.W.
1,002 tons S.W.

VI-7B Other Metal End Products
Offer: $135,600 (old orders only)
See offer for "Other Materials, including Metals and their Products"

21 tons S.W.

Other Metals and Products
Request: 12,068 tons
(I.I. 28, balance)
Offer: See offer for "Other Materials, including Metals and their Products."

VI-9A Aviation Gasoline Over 99 Octane from U. S.¹
Request: 100,000 tons
(I.I. 29)
Offer: 100,000 tons—100 Octane
75,000 tons in bulk
25,000 tons N.W. in drums
(To be made available as shipped)
75,000 tons S.W.
25,000 tons S.W.
28,250 tons S.W.
liquid cargo in bulk
dry cargo

VI-9E Gasoline Blending Agents from U. S.³
Request: 300,000 tons
(I.I. 29)
Offer: 300,000 tons alkylates
288,000 tons in bulk
12,000 tons N.W. in drums
(To be made available as shipped)
288,000 tons S.W.
13,920 tons S.W.
liquid cargo in bulk
dry cargo

VI-9H Lubricating Oils and Greases from U.S.
Request: 25,000 tons
(I.I. 29)
Offer: 25,000 tons
20,000 tons in bulk
5,000 tons N.W. in drums
(To be made available as shipped)
20,000 tons S.W.
5,650 tons S.W.
liquid cargo in bulk
dry cargo

VI-9J Chemical Additives from U. S.
Request: 1,000 tons
(I.I. 29)
Offer: 1,000 tons N.W.
(To be made available as shipped)
1,130 tons S.W.
dry cargo

¹ Quantities of aviation gasoline and blending agents offered by the United States will be reduced to the extent that such materials are furnished to the U.S.S.R. from Abadan by the U.K. without replacement to the U.K. from U.S. controlled sources.

The U.S. reserves the right to reduce quantities of blending agent on a ton for ton basis to compensate for any increase of supply from the U.S. over 100,000 tons of aviation gasoline over 99 octane.
VI-9B, C, D, F, G,

I. and K Other Petroleum Products from U. S.

Request: 74,000 tons

Offer: 74,000 tons
60,000 tons S.W. liquid cargo in bulk
60,000 tons in bulk
14,000 tons N.W. in drums
15,820 tons S.W. dry cargo
(To be made available as shipped)

VI-9 Petroleum Products from Abadan

Request: 300,000 tons

Offer: 300,000 tons to be delivered for U. S. account from U.K. stocks at Abadan and to be replaced to U.K. by U.S. (Dependent upon ability to provide type of product requested.)

VI-10A6 Calcium Carbide

Offer: 124 tons N.W. (old orders only)
131 tons S.W.

VI-10A7 Calcium Chloride

Offer: 45 tons N.W. (old orders only)
46 tons S.W.

VI-10A8 Caustic Soda

Request: 30,000 tons

Offer: 30,000 tons N.W.
31,800 tons S.W.

VI-10A9 Phosphorus

Offer: 175 tons N.W. (old orders only)
177 tons S.W.

VI-10A10 Potassium Carbonate

Offer: 56 tons N.W. (old orders only)
60 tons S.W.

VI-10A12 Potassium Dichromate

Request: 2,000 tons (includes other Dichromates) (II 44 part)

Offer: 1,500 tons N.W.—Dichromates
1,620 tons S.W.
In addition, 500 tons N.W. will be made available for production of Saccharin (VI-10B20) and Resistance Wire (VI-3D3)

VI-10A15 Potassium Tetraoxide

Request: 350 tons

Offer: 350 tons N.W.
560 tons S.W.

VI-10A17 Sodium Cyanide

Request: 1,500 tons

Offer: 900 tons N.W.
972 tons S.W.

VI-10A20 Sodium Dichromate

Request: See VI-10A12

Offer: See VI-10A12
VI-10A99 Miscellaneous Inorganic Chemicals
Offer: 607 tons N.W. (old orders only) 700 tons S.W.

VI-10B1 Acetone
Request: 6,000 tons
(II 37)
Offer: 6,000 tons N.W. 7,020 tons S.W.

VI-10B4 Butyl Acetate
Request: 6,000 tons
(II 39)
Offer: 4,000 tons N.W. 4,480 tons S.W.

VI-10B5 Butyl Alcohol
Request: 8,000 tons
(II 38)
Offer: 6,000 tons N.W. 6,840 tons S.W.

VI-10B6 Camphor
Request: 800 tons
(II 43)
Offer: 800 tons N.W. 928 tons S.W.

VI-10B7 Casein
Request: 1,700 tons
(II 41)
Offer: 1,700 tons N.W. 1,700 tons S.W.

VI-10B8 Citric Acid
Request: 800 tons
Offer: 0
Will be supplied by U.K.

VI-10B10 Dibutylphthalate
Request: 2,000 tons
(II 44 part)
Offer: 1,500 tons N.W. 1,665 tons S.W.

VI-10B14 Diphenylguanidine
Offer: 64 tons N.W. (old orders only) 75 tons S.W.

VI-10B15 Ethyl Acetate
Request: 5,000 tons
(II 46)
Offer: 5,000 tons N.W. 5,600 tons S.W.

VI-10B16 Ethyl Alcohol
Request: 180,000 tons
(II 36)
Offer: 180,000 tons N.W. in bulk
180,000 tons S.W. liquid cargo in bulk

VI-10B19 Ethylene Glycol
Request: 4,000 tons
(II 30)
Offer: 4,000 tons N.W. 4,400 tons S.W.
VI-10B21 Furfural
Offer: 820 tons N.W. (old orders only) 902 tons S.W.

VI-10B22 Glycerine
- Request: 4,400 tons
  (II 34)
- Offer: 4,400 tons N.W. 5,192 tons S.W.

VI-10B23 Hexamine (Urotropine)
- Request: 4,400 tons
  (II 33)
- Offer: 3,000 tons N.W. 3,300 tons S.W.

VI-10B24 Methanol
- Request: 12,000 tons
  (II 32)
- Offer: 9,200 tons N.W.
  950 tons in bulk 9,075 tons S.W.
  8,250 tons in drums dry cargo

VI-10B26 Phenol
- Request: 12,000 tons
  (II 31)
- Offer: 12,000 tons N.W. 13,440 tons S.W.

VI-10B27 Potassium Butyl Xanthate
- Request: 1,350 tons
  (II 42)
- Offer: 1,350 tons N.W. 1,485 tons S.W.

VI-10B30 Saccharin
- Request: 560 tons
  (II 44)
- Offer: 372 tons N.W. 446 tons S.W.

VI-10B32 Toluol
- Request: 40,000 tons
  (I A&M 12)
- Offer: 39,574 tons N.W. in bulk 39,574 tons S.W.

VI-10B34 Paraphenetidin and Paranitrochlorbenzol
- Request: 200 tons
  (II 44 part)
- Offer: 158 tons N.W. 179 tons S.W.
  38 tons Paraphenetidin
  120 tons Paranitrochlorbenzol

VI-10B99 Miscellaneous Organic Chemicals
- Offer: 878 tons N.W. (old orders only)
  See offering “Other Chemicals” 983 tons S.W.

VI-10C Gases
- Offer: $9,400 (old orders only) 30 tons S.W.
VI–10D1 Paints, Varnishes, Lacquers, Etc.
Offer: 562 tons N.W. (old orders only) 607 tons S.W.

VI–10D2 Carbon and Lamp Black
Offer: 2,240 tons N.W. (old orders only) 2,912 tons S.W.

VI–10D3 Other Pigments
Offer: 406 tons N.W. (old orders only) 422 tons S.W.

VI–10F Insecticides
Offer: 23 tons N.W. (old orders only) 25 tons S.W.

VI–10G2 Vulcanized Fibre
Request: 1,000 tons
II 49
Offer: 1,000 tons N.W. 1,180 tons S.W.

VI–10G3 Cellulose Film Base
Offer: 2,795,000 ft. (677 tons N.W.) (old orders only) 812 tons S.W.

VI–10G9 Miscellaneous Plastics
Offer: 13 tons N.W. (old orders only) 15 tons S.W.

VI–10H1 Ammonia Rubber Paste
Offer: 216 tons N.W. (old orders only) 237 tons S.W.

VI–10H2 Ethyl Centraflite
Request: 800 tons
II 44 part
Offer: 350 tons N.W. 466 tons S.W.

VI–10H3 Boiler Compounds
Offer: 51 tons N.W. (old orders only) 57 tons S.W.

VI–10H4 Miscellaneous Flotation Reagents (Aerofloats)
Request: 400 tons
II 44 part
Offer: 400 tons N.W. 440 tons S.W.

VI–10H6 Photogelatine
Request: 250 tons
II 44 part
Offer: 250 tons N.W. 300 tons S.W.

VI–10H99 Miscellaneous Chemicals
Offer: 435 tons N.W. (old orders only) 500 tons S.W.

Other Chemicals
Request: 9,700 tons
II 44 balance
Offer: Consideration will be given to the acceptance of 10,670 tons S.W. orders for 10,200 tons of various chemicals which will be in addition to the offerings listed above.

VI–11A Cotton Cloth
Request: 25,084,000 yds. including 25,000,000 yds. uniform cloth
Offer: 25,000,000 yds. uniform twill and 84,000 yds. calico (old orders) 7,520 tons S.W.
VI-11B Woollen Cloth
Request: 21,662,000 yds.
(V 4)
Offer: 20,712,000 yds.
  10,000,000 yds. overcoating, Army type
  7,050,000 yds. suiting, Army type
  1,750,000 yds. in first half
  5,300,000 yds. in second half
  1,364,000 yds. Navy type, old orders
  2,000,000 yds. Navy type, new orders
  298,000 yds. miscellaneous, old orders.

19,443 tons S.W.

VI-11C Webbing
Request: 12,000,000 yds.
(V 7)
Offer: 0
Note: Approximately 21,000,000 yds. available for export on June 30, 1944.

VI-11D Tarpaulin and Duck
Request: 3,000,000 yds. 54" to 72" width
(V 6)
Offer: 3,000,000 sq. yds.
  500,000 in first half
  2,500,000 in second half

2,833 tons S.W.

VI-11F Cordage and Twine
Request: 8,000 tons—4,000 tons sisal rope
  4,000 tons binder twine
(II 50)
Offer: 4,000 tons N.W. sisal rope
  4,000 tons N.W. binder twine

9,200 tons S.W.

VI-11G Other Basic Textiles
Offer: $1,493,000 (old orders only)

960 tons S.W.

VI-12A Fish Nets
Offer: 386 tons N.W. (old orders)
  Additional quantities under study.

394 tons S.W.

VI-12B Other Textile Products
Offer: $56,000 (old orders only)

35 tons S.W.

VI-13 Leather
Request: 22,000 tons—18,000 tons sole leather
  4,000 tons retanned upper leather
(V 1 & 2)
Offer: 11,963 tons N.W.
  509 tons U.S. sole leather
  9,481 tons sole and insersole leather from South America
  780 tons U.S. upper leather
  1,193 tons upper leather from South America

12,322 tons S.W.

VI-14 End Products of Leather
Offer: $8,800 (old orders only)

5 tons S.W.
VI-15 Crude Rubber
Offer: 168 tons N.W. ($162,000) (old orders only) 170 tons S.W.
See VI-18C.

VI-16A Vistanex
Offer: 410 tons N.W. ($336,000) (old orders only) 447 tons S.W.

VI-16B Other Synthetic Rubber
Offer: 112 tons N.W. ($20,000) (old orders only) 128 tons S.W.
See VI-18C

VI-17B Other Rubber Materials
Offer: $506,000 (old orders only) 1,316 tons S.W.
See VI-18C

VI-18A Tires and Tubes
Request: 40,320 tons of rubber in tires and tubes and other rubber products.
(II 45)
Offer: No firm offer can be made. The U.S. will attempt to supply up to 100,000 tires and tubes each month subject to acceptable size distribution and the maintenance of U.S. production goals. 27,000 tons S.W.

VI-18B Rubber Hose
Request: See VI-18A
Offer: $1,532,000 (old orders only) 1,992 tons S.W.
(See also VI-18C)

VI-18C Other Rubber Products
Request: See VI-18A
Offer: $15,320,000 21,448 tons S.W.
$5,450,000 (old orders only)
$9,870,000 (new orders including VI-15, VI-16B, VI-17B, VI-18B, VI-19C, and VI-20D)

VI-19A Army Boots
Request: 5,000,000 pair
(V 3)
Offer: 5,000,000 pair 13,250 tons S.W.

VI-19C Rubber Boots and Shoes
Offer: $125,000 (old orders only) 162 tons S.W.
See VI-18C

VI-19D Other Boots and Shoes
Offer: $952,000 (old orders only) 190 tons S.W.

VI-20A Leather Jackets
Offer: 20,000 (old orders only) 132 tons S.W.

VI-20B Leather Belts
Offer: 42,000 (old orders only) 13 tons S.W.

VI-20C Miscellaneous Leather Apparel
Offer: $121,000 (old orders only) 42 tons S.W.

VI-20D Rubber Apparel
Offer: $27,000 (old orders only) 5 tons S.W.
VI-20E Other Apparel
Offer: $496,000 (old orders only) 100 tons S.W.

VI-21A Abrasive Grain
Request: 4,000 tons
(IV 9, part)
Offer: Up to 8,700 tons N.W. 8,790 tons S.W.

VI-21B Abrasive Products
Request: 6,000 tons
(IV 9, part)
Offer: $6,000,000 4,800 tons S.W.

VI-22A Graphite Powder
Request: See VI-22B
Offer: Up to 1,913 tons N.W. 2,085 tons S.W.

VI-22B Graphite and Carbon Electrodes
Request: 9,000 tons graphite electrodes and other graphite products
(IV 11)
Offer: 6,350 tons N.W. 7,810 tons S.W.

VI-22C Other Graphite Materials
Request: See VI-22B
Offer: $550,000 55 tons S.W.

VI-23A Parchment Paper
Request: 3,000 tons
(II 47)
Offer: 1,680 tons N.W. 1,865 tons S.W.

VI-23B Map Paper
Request: 3,000 tons
(II 46)
Offer: 3,000 tons N.W. 3,300 tons S.W.

VI-23D Condenser Paper
Request: 150 tons
(II 48)
Offer: 150 tons N.W. 175 tons S.W.

VI-23E Other Pulp, Paper, Etc.
Request: 4,713 tons
(IV 13)
Offer: 4,713 tons N.W.
189 tons old orders
2,912 tons ammunition paper, new orders
1,368 tons wrapping paper, new orders
132 tons writing paper, new orders
112 tons coated white paper, new orders
New orders subject to acceptable specifications.

VI-24 Paper Products
Offer: $12,000 (old orders only) 25 tons S.W.

VI-25A1 Photographic Film and Paper
Offer: $24,000 (old orders only) 140 tons S.W.
FOURTH PROTOCOL

U.S.
Ref. No.

VI–25A Reproduction Paper Stock
Request: 824 tons
Offer: 824 tons N.W.
224 tons old orders
600 tons new orders
927 tons S.W.

VI–28B Asbestos Products
Offer: $100,000 (old orders only)
140 tons S.W.

VI–27 Buttons
Offer: $357,000 (old orders only)
320 tons S.W.

VI–98 Other Basic Materials
Offer: $21,000 (old orders only)
20 tons S.W.

VI 99 Other End Products
Offer: $10,000 (old orders only)
10 tons S.W.

Other Materials, including Metals and their Products (except Chemicals)
Request: $5,000,000

Offer: $9,575,000 new orders subject to acceptance of specifications, etc., after review by appropriate U.S. agencies where specific offers listed above are found inadequate for the realistic needs of the U.S.S.R.
12,925 tons S.W.

ANNEX III

Subject to the terms of the Fourth Protocol, of which this is a part, the supplies set forth below are to be made available in addition to those selected from Annex II.

S.W. = Shipping weight packed for export.
N.W. = Net weight.
All tons are short tons of 2,000 pounds each.
Dollar evaluations are estimates only.

The estimated shipping weights shown below are for those quantities to be made available by June 30 only, and total 798,637 short tons (567,917 short tons dry cargo and 230,720 short tons liquid cargo in bulk).

GROUP I—Aircraft and Aircraft Equipment

Estimated shipping weight of quantities to be made available by June 30, 1945–78,900 tons

U.S.

Ref. No.

I–1F Flying Boats – 50 (30 by June 30, for flight-delivery) Catalina - PBY–5A
I–6B Airplane Landing Mats – 53,000,000 sq. ft. (30,000,000 sq. ft. by June 30, 78,900 tons S. W.)

SOVIET SUPPLY PROTOCOLS

GROUP II—Military Supplies

Estimated shipping weight of quantities to be made available by June 30, 1945—
171,845 tons.

Ref. No.

II–2A Field Repair Trucks — 654 (174 by June 30, — 1,231 tons S.W.)

70 — Automotive repair load B (M8) (after June 30)
440 — Machine shop load A (M10) (100 by June 30)
70 — Electrical repair (M18) (all by June 30)
70 — Welding (Ordnance maintenance set L) (all by June 30)
4 — Cause type field repair shops (all by June 30)

With the exception of 170 G.M.C. trucks for mounting 100 machine shops, load A(M16) and 70 electric repair shops (M18), truck chassis will be taken from offerings in Annex II.

II–3A1 Jeeps (1½ ton 4 x 4 trucks) — 2,000 (all by June 30 — 3,000 tons S.W.)
II–3A2 Jeeps (Amphibian) — 500 (all by June 30, — 1,114 tons S.W.)
II–3B1 Trucks, 3⁄4 ton — 2,000 (all by June 30, — 7,200 tons S.W.)

4 x 4 Weapons Carriers

II–3B2 Trucks, 11⁄2 ton — 23,000 (all by June 30, — 114,190 tons S.W.)

11,000 — 4 x 2 cargo
12,000 — 4 x 4 cargo

II–3B4 Trucks, 21⁄2 ton Amphibian — 1,000 (all by June 30, — 8,000 tons S.W.)

6 x 6 cargo DUKW

II–3D Trucks, Special Purpose — 2,382 (1,602 by June 30, — 11,229 tons S.W.)

104 — 11⁄2 ton 4 x 4 dump (all by June 30)

104 — 21⁄2 ton 6 x 6 dump (all by June 30) (chassis to be taken from Annex II offering)

4 — Class 135, fire crash (all by June 30) (16 additional under study)

100 — Snow plows, rotary type, gasoline engine driven on 6 ton 6 x 6 truck mounting (20 by June 30)

1, 500 — Tank trucks, gasoline, 21⁄2 ton 6 x 6, 750 gal., gravity flow (chassis to be taken from Annex II offering) (1300 by June 30)

300 — Tank trucks, gasoline, 21⁄2 ton 6 x 6, 750 gal. with pump (chassis to be taken from Annex II offering) (after June 30)

200 — Tank trucks, gasoline, 4 ton 6 x 6, 1200 gal. (after June 30)

70 — Wreckers, heavy M1A1 (all by June 30)

II–31 Truck-Tractors With Trailers — 300 (120 by June 30, — 2,318 tons S.W.)

F–1A Fuel servicing units

(one tractor F–1 and one trailer F–1A, 4,000 gal.)

II–4B1 Track-Laying Tractors — 807 (614 by June 30 — 10,888 tons S.W.)

628 — Class II Prime mover or construction type with winch and hook (435 by June 30)

179 — Class III Prime mover or construction type, with winch and hook (all by June 30)

II–7A2 Radio Stations Over 1 K.W. — 15 (after June 30)

5 — 7½ K.W.

10 — 3 K.W.

II–7B2 Radio Stations 1 K.W. and Under — 235 (all by June 30, — 980 tons S.W.)

. 50 — SCR 177–B

185 — SCR 399

II–7D2 Radio Locators, Ground — 30 (all by June 30 — 330 tons S.W.)

SCR 584
FOURTH PROTOCOL

U. S.
Ref. No.

II–8A Road and Airport Construction Equipment – 280 units ($1,784,320) (all by June 30, – 4,139 tons S.W.)
250 – Graders, motorized, 12 ft. mold board, diesel engine driven ($1,658,500)
30 – Road rollers, 10 ton, gasoline engine driven ($125,820)

II–8B Tractor Mounted Construction Equipment – 100 units ($909,500) (all by June 30, – 2,000 tons S.W.)
Tractors, Class II with dozers.

II–8C Mixers and Pavers, Bituminous and Concrete – 35 units ($278,820) (all by June 30, – 410 tons S.W.)
10 – Distributors, Bituminous, trailer mounted 1,250 gal. ($46,440)
5 – Loaders, aggregate, Barber Greene Model 82A ($29,400)
5 – Mixers, asphalt, 110–200 tons Barber Greene Model 848 ($76,280)
5 – Finishers, asphalt, Barber Greene Model 879A ($38,500)
10 – Asphalt and soil plants, 2 units each ($117,600)

II–9A1 Steam Locomotives, R.R. – 500 (after June 30)
60’’ gauge, 2–10–0, – 105 ton

II–9B1 Flat Cars, R.R.
5,000 have been added to Annex II offering to meet this requirement and will be made available after June 30.

II–9B3 Tank Cars, R.R. – 1,000 (after June 30)
60’’ gauge, 10,000 gal.

II–10 Medical Supplies
Under study for supply from unused balance of Annex II offering.

II–11C1 Portable Pipe Lines – 3 units (after June 30)
Military, 6’’, 100 mile units with pumps, etc.

II–11C2 Portable Storage Tanks – 56 (all by June 30 – 2184 tons S.W.)
Steel, gasoline or oil, horizontal, 10,000 bbl. capacity

II–11E Pontoon Bridges – 25 sets (all by June 30 – 1,902 tons S.W.)
25 – Bridge, floating, pontoon, 10 ton
100 – Trailers, 2-wheel utility, type II, trestle bay load, 10 ton pontoon
150 – Semi-trailers, special drop frame, 10 ton, pontoon (tractors for semi-trailers under study)

II–11H Tents, Military – 10,000 (1,500 by June 30 – 270 tons S.W.)

II–11I Truck Assembly Sets – 2 (all by June 30, – 100 tons S.W.)
TUP assembly sets per SNL–N–348 but without truck-mounted cranes.
In addition, 1 unit formerly at Khorr Ramshahr, Iran.

GROUP III—Naval and Marine Supplies
Estimated shipping weight of quantities to be made available by June 30, 1945 – 3,900 tons.

III–1B Tankers – 10 (all by June 30, under own power)
Wye – 182 ft.

III–1C Icebreakers – 2 (all by June 30, under own power)
CR 98 and CR 99

III–1D Tug Boats – 2 (all by June 30 – 100 tons S.W.)
Fire tugs, 65 ft.

III–1J Floating Repair Shops – 6 (all by June 30 – 570 tons S.W.)
2 – Barges, steel, 104 ft. machine shop
4 – YR (to be towed)

III–2A Submarine Chasers, 110 ft. – 56 (43 by June 30, under own power)
108 tons SC
GROUP IV—Foodstuffs and Related Products

Estimated shipping weight of quantities to be made available by June 30, 188,185 tons.

IV–1B Wheat Flour – 67,200 tons N.W. (all by June 30, 71,702 tons S.W.)

IV–1D Dried Peas and Beans – 22,400 tons N.W. (all by June 30, 23,900 tons S.W.)

Beans

IV–2B Sugar from Other Sources – 5,600 tons N.W. (all by June 30, 5,656 tons S.W.)

Granulated from Cuba

IV–3C Tushonka and Other Canned Meat

Canned meat under study

IV–4B1 Fat Cuts – 6,720 tons N.W. (all by June 30, 8,736 tons S.W.)

IV–6A Canned Milk – 3,360 tons N.W. (all by June 30, 4,167 tons S.W.)

Sweetened condensed

IV–6I Dried and Dehydrated Vegetables – 6,720 tons N.W. (all by June 30, 9,408 tons S.W.)

3,360 tons N.W. Dehydrated potatoes
1,680 tons N.W. Dehydrated carrots
560 tons N.W. Dehydrated beets
1,120 tons N.W. Dehydrated onions

IV–6J Dried Soups – 3,360 tons N.W. (all by June 30, 3,864 tons S.W.)

1,120 tons N.W. Dehydrated tomato soup
2,240 tons N.W. Tomato flakes

IV–8N Feed – 56,000 tons N.W. (all by June 30, 60,752 tons S.W.)

Barley fodder

IV–8P Tobacco – 2,240 tons N.W. (after June 30)

Smoking – dependent upon receipt of acceptable specifications.

GROUP V—Machinery and Equipment

Estimated shipping weight of quantities to be made available by June 30, 1945–10,536 tons.

V–2B Compressors, Other – 100 units ($395,800) (all by June 30, 350 tons S.W.)

Air compressors, trailer mounted, 210 C. F. M.
FOURTH PROTOCOL

V-4 Crushing, Pulverizing, Screening and Mixing Machinery and Equipment – 20 units ($528,520) (all by June 30, 374 tons S. W.)
Crushing and screening plants, 25 cu. yd.

V-5 Conveyors and Conveying Systems – 120 units ($190,140) (all by June 30, 279 tons S. W.)
30 – Type I, portable, horizontal 20’ sec. with electric drive ($48,900)
30 – Type II, portable, horizontal 20’ driven sec. ($43,800)
60 – Portable slat conveyors, Jeffrey type 220-D, with wood apron (stackers) ($97,440)

V-6B Cranes, Derricks, Hoists and Winches, Other – 21 units ($2,465,000)
(all by June 30, 6,105 tons S. W.)
4 – Cranes, floating K. D., 60 tons ($860,000)
1 – Crane, floating, 100 tons ($525,000)
16 – Cranes, portal wharf, 45 tons, 32 ft. ga. ($1,080,000)

V-13B1 Generator Sets, Military – 115 units ($216,155) (all by June 30, 190 tons S. W.)
100 – Charging sets, 5 K. W. ($150,000)
10 – Generating sets, 30 K. W. ($39,380)
5 – Generating sets, 50 K. W. ($26,775)

V-13B3 Generator Sets, Other – 14 units ($195,842) (6 by June 30, 120 tons S. W.)
Mobile electric stations 250 K. W.

V-25 Woodworking Machinery – 520 units ($371,400) (all by June 30, 480 tons S. W.)
20 – Sawmills, portable, gas engine driven, 60’” saw ($142,900)
500 – Chain saws, portable, gas engine driven, 36’’ saw ($228,500)

V-33 Gas Generating, Conditioning and Other Gas Producing Apparatus – 36 units ($1,400,000) (after June 30)
Oxygen plants, 100 C. F. M.

V-51 Well and Blast Hole Drilling Machinery – 20 units ($67,300) (all by June 30, 114 tons S. W.)
Well drilling machines, percussion, gas engine driven

V-52A Excavating and Dredging Machinery and Equipment – 211 units ($2,218,860) (146 by June 30, 2,524 tons S. W.)
100 – Cranes, truck mounted, class XI, XII or XIV ($630,000) (35 by June 30)
40 – Crawler cranes, shovels or combinations Class III, 7–10 ton ($504,000)
(all by June 30)
20 – Scrapers, road, cable operated, towed type, 8 yd. ($68,100) (all by June 30)
1 – Pile driver, 40’, 2000 lbs., gas engine driven ($5,460) (by June 30)
50 – Cranes, crawler mounted, Class III with attachments ($1,011,300) (all by June 30)

GROUP VI—Other Materials and Products

Estimated shipping weight of quantities to be made available by June 30, 1945, 114,551 tons dry cargo and 230,720 tons liquid cargo in bulk.

VI-1–25I Galvanized Tel. and Tel. Wire – 4,500 tons N. W. (all by June 30, 4,950 tons S. W.)

VI-1–51 A & B Barbed Wire and Staples – 5,850 tons N. W. (all by June 30, 5,982 tons S. W.)
U.S. Ref. No.

VI–1–101 A & B R. R. Rails and Accessories – 100,236 tons N. W. (all by June 30, – 101,238 tons S. W.)
Includes turnouts and switches

VI–3A4 Bare Copper Cable and Wire – 1,176 tons N. W. (all by June 30, – 1,411 tons S. W.)

VI–6A3 Field Telephone Wire
To be supplied from Annex II

VI–6A4 Other Insulated Wire and Cable – 72,167 ft. ($47,004) (all by June 30, – 221 tons S. W.)

VI–6C Fabricated Structural Iron and Steel – 70 units ($127,600) (all by June 30, – 89 tons S. W.)
Quonset huts, 40’ x 100’ x 20’, clear on inside.

VI–7B Other Metal End Products – 1,000 units ($23,000) (all by June 30, – 60. tons S. W.)
Cylinders, gas, empty, oxygen, 220–240 cu. ft.

VI–9A Aviation Gas Over 99 Octane – 134,400 tons N. W. (all by June 30 – 134,400 tons S. W. liquid cargo in bulk)

VI–9D Automotive Gas – 78,400 tons N. W. (all by June 30, – 78,400 tons S. W. liquid cargo in bulk)

VI–9H Lubricating Oils and Greases – 17,920 tons N. W. (all by June 30, – 17,920 tons S. W. liquid cargo in bulk)

11,200 tons N. W. aviation oil
6,720 tons N. W. motor oil

VI–11A Cotton Cloth
Material for 100,000 pillow ticks and 13,200,000 yds. cotton cloth under study.

VI–11B Woollen Cloth – 7,000,000 yds. (after June 30)
3,000,000 yds. overcoating
4,000,000 yds. uniform

VI–12B Other Textile Products – (all by June 30, – 600 tons S. W.)
100,000 Blankets, wool
100,000 Mattress covers, heavy
100,000 Sheets, standard
100,000 Pillow cases, standard

VI–19A Army Boots
Under study
United Kingdom Schedule of Supplies and Shipments for the Fourth Soviet Protocol

The Government of the United Kingdom undertake, subject to the provisions of the Protocol and to the marginal comments in respect of particular items, to make available for despatch to the Government of the Union of Soviet Socialist Republics during the period the 1st July, 1944, to the 30th June 1945, the supplies set out below.

The Government of the United Kingdom undertake, subject to the provisions of Article II of the Protocol, to provide the shipping tonnage necessary, with any Soviet tonnage which may be available, to lift the supplies set out below, save that such undertaking will not apply to supplies originating in Australia and New Zealand, nor to supplies originating in North America, which, by agreement between the Governments of the United States and the United Kingdom, are to continue to be carried in United States ships. These supplies will be despatched either to the Persian Gulf, the Black Sea or to Soviet Northern ports, whichever, in the light of changing circumstances, proves from time to time to be more practicable. In the choice of routes for the despatch of particular supplies, regard will be had to the wishes of the Soviet Government so far as the factors mentioned in Article II of the Protocol permit.

Except where otherwise stated, the amounts offered under Group II of the United Kingdom Schedule include any outstanding balances of items agreed to be supplied under the Third Protocol which were not shipped or booked for shipment on a named vessel before the 1st July, 1944, as well as any quantities of such items which have been lost in transit to the Union of Soviet Socialist Republics before the 1st July, 1944, where agreement to replace such losses had not been communicated to the Soviet authorities before the said date.

It is appreciated that reasonable stockpiles of stores must be maintained, so that the Union of Soviet Socialist Republics can, as shipping opportunities occur, select cargo for shipment that is most needed to meet the ever-changing requirements of war. However, the United Kingdom reserves the right to limit the size of such individual stockpiles either by control of production or diversion of product or both, when in its judgment such action is in the best interest of the common cause. In taking such action due consideration will be given to the expressed needs of the Union of Soviet Socialist Republics.
Programme of Supplies From the United Kingdom to
the Union of Soviet Socialist Republics for the Fourth
Protocol Period

(Weights in long tons, unless otherwise stated; price in sterling)

GROUP I.—Armaments and Military Equipment

   50 aircraft monthly during the period July—September 1944, and 100 aircraft
   monthly during the period October 1944-June 1945 inclusive. Spare parts
   are to be supplied on the same scale as during the Third Protocol Period.

2. Propellants.—Cordite R.S.................. 3,000 tons. The possibility of supplying
   a further 1,000 tons will be considered.

3. Aviation Spirit and Components—
   Aviation Spirit (100/130 Grade) .. 240,000 short tons.
   Aviation Spirit Components (alkyl-
   lates).
   Aviation spirit and components will be made available at Abadan in
   accordance with the Agreement with the Government of the United
   States by which the latter will make available a similar quantity to the
   Government of the United Kingdom out of the quantity of aviation
   spirit allocated to the Government of the Soviet Union by the Govern-
   ment of the United States.

4. Motor Spirit, 70 Octane................... 60,000 tons will be made available at
   Abadan from August to December
   1944 inclusive. The monthly quanti-
   ties will be fixed in accordance with
   available drumming and transport
   capacity across Persia.

5. Radar Equipment (Radio Location Sets)—
   Item (i) Army Equipments—
      A.A. No. 4 Mark III (vehicle) .. 25 sets.
      S.L.C. 150 cm. projectors with
      generators.
      C.A. No. 1 Mark III*.............. 4 sets. To be supplied in April 1945.
      C.A. No. 1, Mark II*............... 4 sets.
   Item (ii) Navy Equipments—
      Type 271........................... 10 sets.
      Type 277........................... 40 sets.
   Item (iii) Air Equipments—
      H.2.S., Mark II.................... Under consideration, by the Govern-
      ment of the United Kingdom.
      A.I., Mark VIII B.................. 55 sets.
      Homing beacons A.I.—
      Type TR 3236...................... 10 sets.
      Type TR 3559...................... 10 sets.
      I. F. F. Mark III (Ground)........ 10 sets.
      GEE, Mark II (Airborne)........... 300 sets.
      GEE, Mark II (Ground)............ 3 sets.
FOURTH PROTOCOL

393,200, of which 186,200 will be released from stocks and 207,000 from production.

Under consideration by the Government of the United Kingdom.

6. Naval Equipment—

Item (i) Mine Trailing and Navigational Equipment—

A spic Sets—
Type 144.......................... 80.
Type 129.......................... 50.

Item (ii) Electromagnetic Travels... 14 sets.

Item (iii) L. A. A. Sweeps......... 10 sets.

Item (iv) Portable installations for trailing mines near piers and moorages... 3 sets.

GROUP II.—Raw Materials

Item
1. Rubber.......................... 24,000 tons from Ceylon.
2. Nickel.......................... 1,000 short tons.
3. Copper.......................... 3,000 tons.
4. Lead............................. 500 tons.
5. Sisal Trawl Twine.............. 500 tons.
6. Industrial Diamonds to the value of. £48,321 9s. 11d.

Requests by the Government of the U.S.S.R. for additional supplies of raw materials will be considered in relation to the supply position at the time the request is submitted.

GROUP III.—Industrial Equipment

Requests by the Government of the U.S.S.R. for Industrial Equipment will be considered in relation to the capacity and materials existing at the time the request is submitted.

GROUP IV.—Medical Supplies

SECTION I: DRUGS

Item
1. Aspirin.......................... 75 tons.
2. Atébrin................................ 20 tons of Mepacrin Hydrochlor. 0.1 G Tablets 200 mill.
3. Acetanalide.......................... 100 tons.
4. Barium Sulphate (for X-Ray Appara-
tus).......................... 10 tons.
5. Hexonal............................ 1,000,000 ampoules of Hexobarbitaline Sol. 1 G.
7. Insulin, 40 units per c.c........... 200,000 x 5 c.c. bottles.
8. Insulin Zincprotamine............. 120,000 x 50 c.c. bottles.
9. Nicotinic Acid..................... 300 kilog.
10. Citric Acid....................... 1,000 kilog.
**SOVIET SUPPLY PROTOCOLS**

**SECTION I: DRUGS—Continued**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Potassium Bromide</td>
<td>5 tons.</td>
</tr>
<tr>
<td>12.</td>
<td>Compolon</td>
<td>50,000 x 2 c.c. ampoules of Extract Hepatis.</td>
</tr>
<tr>
<td>13.</td>
<td>Codein, Pure</td>
<td>1 ton.</td>
</tr>
<tr>
<td>14.</td>
<td>Caffein, Pure</td>
<td>4 tons. The possibility of supplying the balance in an alternative substance is being considered.</td>
</tr>
<tr>
<td>15.</td>
<td>Cocoa-Butter</td>
<td>20 tons.</td>
</tr>
<tr>
<td>16.</td>
<td>Camphor in Oil (20 per cent.)</td>
<td>15,000,000 x 1 c.c. ampoules.</td>
</tr>
<tr>
<td>17.</td>
<td>Chaulmoogra Oil</td>
<td>1 ton.</td>
</tr>
<tr>
<td>18.</td>
<td>Alepol</td>
<td>10 kilog.</td>
</tr>
<tr>
<td>19.</td>
<td>Magnesia (MgO)</td>
<td>9 tons of Magnesium Oxide.</td>
</tr>
<tr>
<td>20.</td>
<td>Novakain</td>
<td>3 tons of Procaine Hydrochlor.</td>
</tr>
<tr>
<td>21.</td>
<td>Sodium Bicarbonate</td>
<td>50 tons.</td>
</tr>
<tr>
<td>22.</td>
<td>Pyridine, Pure</td>
<td>20 tons.</td>
</tr>
<tr>
<td>23.</td>
<td>Peptone</td>
<td>3 tons.</td>
</tr>
<tr>
<td>25.</td>
<td>Papaverine</td>
<td>150 kilog. of synthetic equivalent. Further offer under consideration.</td>
</tr>
<tr>
<td>26.</td>
<td>Rivanol</td>
<td>3 tons of Eulflavine.</td>
</tr>
<tr>
<td>27.</td>
<td>Sulphanilamide</td>
<td>30 tons.</td>
</tr>
<tr>
<td>28.</td>
<td>Sulphidine</td>
<td>5 tons of Sulphapyridine.</td>
</tr>
<tr>
<td>29.</td>
<td>Stephanuts Seeds</td>
<td>2 tons.</td>
</tr>
<tr>
<td>31.</td>
<td>Strychnine Nitrars</td>
<td>50 kilog.</td>
</tr>
<tr>
<td>32.</td>
<td>Salygran</td>
<td>250,000 ampoules x 2 c.c. of Inj. Mersaly1 B.P.</td>
</tr>
<tr>
<td>33.</td>
<td>Terpeene Hydrate</td>
<td>3 tons.</td>
</tr>
<tr>
<td>34.</td>
<td>Theobromine, Pure</td>
<td>5 tons.</td>
</tr>
<tr>
<td>35.</td>
<td>Phenaacetin</td>
<td>15 tons.</td>
</tr>
<tr>
<td>37.</td>
<td>Cardiamin</td>
<td>1,300,000 x 2 c.c. ampoules of Inj. Nikethamide B.P.</td>
</tr>
<tr>
<td>38.</td>
<td>Codeine Phosphate</td>
<td>1 ton.</td>
</tr>
<tr>
<td>39.</td>
<td>Maltose</td>
<td>½ ton of B.P.C.</td>
</tr>
<tr>
<td>40.</td>
<td>Salicylic Acid, Technical</td>
<td>50 tons.</td>
</tr>
<tr>
<td>41.</td>
<td>Sodii Citras</td>
<td>2 tons.</td>
</tr>
<tr>
<td>42.</td>
<td>Sodii Salicylas</td>
<td>5 tons.</td>
</tr>
<tr>
<td>43.</td>
<td>Moogrol</td>
<td>500 litres.</td>
</tr>
<tr>
<td>44.</td>
<td>Neostibozan</td>
<td>35,000 x 15-gramme ampoules of Stilbamidine.</td>
</tr>
</tbody>
</table>

**SECTION II: NEUROSURGICAL INSTRUMENTS AND EQUIPMENT**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Forceps, “Halstead,” artery</td>
<td>5,000.</td>
</tr>
</tbody>
</table>
FOURTH PROTOCOL

SECTION III: SURGICAL INSTRUMENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Oxygen Apparatus</td>
<td>50.</td>
</tr>
<tr>
<td>2. Pneumothorax Apparatus, Dr. Chandler’s pattern, with accessories</td>
<td>150.</td>
</tr>
<tr>
<td>4. Stomach Tubes</td>
<td>1,000.</td>
</tr>
<tr>
<td>5. Laryngeal Mirrors</td>
<td>1,500.</td>
</tr>
<tr>
<td>6. Nasopharyngeal Mirrors</td>
<td>500.</td>
</tr>
<tr>
<td>11. Scissors, Surgical, blunt-pointed</td>
<td>25,000.</td>
</tr>
<tr>
<td>12. Scissors, “Cooper” 14.5-em. length</td>
<td>12,000.</td>
</tr>
<tr>
<td>14. Scissors for taking down the “Lister” Bandages (plaster scissors)</td>
<td>25,000.</td>
</tr>
<tr>
<td>15. Shadowless Lamps</td>
<td>250.</td>
</tr>
<tr>
<td>16. Electrical Sterilising Units</td>
<td>2,000.</td>
</tr>
<tr>
<td>17. Thoracosopes with Accessories</td>
<td>100.</td>
</tr>
<tr>
<td>18. Ice Bags</td>
<td>300,000.</td>
</tr>
<tr>
<td>20. Fouls Tourniquets</td>
<td>50,000.</td>
</tr>
<tr>
<td>21. Rubber Tourniquets, various</td>
<td>150,000.</td>
</tr>
</tbody>
</table>

SECTION IV: OPHTHALMOLOGICAL INSTRUMENTS AND APPARATUS

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. “Graefe’s” Linear Cataract Knives, 3 sizes</td>
<td>1,500.</td>
</tr>
<tr>
<td>3. Needles for removing foreign bodies from eyes</td>
<td>1,500.</td>
</tr>
<tr>
<td>4. “Weber” Knives for Lachrymal Duct</td>
<td>1,000.</td>
</tr>
<tr>
<td>5. Needles, Cataractic, straight</td>
<td>1,500.</td>
</tr>
<tr>
<td>6. Chisels for removing foreign bodies</td>
<td>3,000.</td>
</tr>
<tr>
<td>7. Hooks for Iris, sharp and blunt</td>
<td>500.</td>
</tr>
<tr>
<td>8. Hooks, Four-Pronged, for eye resection</td>
<td>750.</td>
</tr>
<tr>
<td>9. “Graefe” Cystitomes, right and left</td>
<td>250.</td>
</tr>
<tr>
<td>11. Ophthalmoscopes, Electrical, with A. C. Feeder</td>
<td>150.</td>
</tr>
<tr>
<td>14. Large Optimetric Glasses, various</td>
<td>1,000 sets.</td>
</tr>
</tbody>
</table>

SECTION V: OPTICS

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Frames, various, for Spectacles</td>
<td>10,000.</td>
</tr>
<tr>
<td>4. Spherometers</td>
<td>15.</td>
</tr>
</tbody>
</table>
SECTION VI: X-RAY EQUIPMENT

1. X-Ray Apparatus, Stationary ............... 150.
2. X-Ray Apparatus, Portable ............... 40.
4. X-Ray Valves, Diagnostic, for 10 kw .... 500.
5. X-Ray Tubes, Diagnostic, for 10 kw ... 1,000.
8. "Levy-West" Fluorescent Screens for 
   X-Ray Examination, with Lead, 
   Glass and Frame, 30 x 40 ................ 500.
9. X-Ray Apparatus for Deep X-Ray 
   Therapy, 200 volts, 10-20 milli- 
   amper .................................. 2 units.

SECTION VII: PHYSIO-THERAPEUTICAL EQUIPMENT

1. Clamps, for stretching ................... 500.
2. Tables, Portables, for stretching and 
   applying the Plaster of Paris Bandages . 3.
3. Apparatus, Mechano-Therapeutical, for 
   Upper and Lower Extremities ............ 20 units.
4. Hospital Beds with "Hoskins" Suspension 
   Apparatus ................................ 5.
5. Sets of Chisels, for Spinal Column, 
   straight and grooved, "Putti" type .. 6 sets.
6. Chisels, for Spinal Column, straight and 
   grooved, "Hibbs" type ................... 2.

SECTION VIII: LABORATORY EQUIPMENT

1. Blood Register Chambers ................. 1,500 "B" type, further supply 
                                           under consideration.
2. Microscopes, large size, binocular, each 
   with achromatic condensers and sets 
   of accumulators ........................ 6.

SECTION IX: DENTISTS INSTRUMENTS

1. Arms, Flexible, for Foot Engines ....... 500.
2. Arms, Flexible, wall type ............... 500.
3. Drills, Beutebrock's, assorted ......... 10,000.
5. Abrasive Points and Wheels .......... 250,000.
8. Handpieces, straight ................... 3,000.
10. Magnifying Mirrors ..................... 3,000.
11. Dental Engine, upright type ......... 100.
12. Dental Engine, wall type ............. 160.
13. Dental Rubber ......................... 20 tons.
FOURTH PROTOCOL

SECTION X: OTOLARYNGOLOGICAL INSTRUMENTS AND EQUIPMENT

1. Mouth Gags ............................................. 300.
3. Lancets Laryngeal ........................................... 200.
4. Curettes "Beckman," various ................................ 2,000.
5. Trocars ..................................................... 500.
6. Aural Polypus Forceps ..................................... 2,500.
7. Syringes, Urethral, Glass ................................... 1,500.

SECTION XI: REAGENTS

1. Ammonium Acetate ......................................... 100 kilog.
2. Ammonium Molybdate ....................................... 2 kilog.
3. Ammonium Vanadinit ....................................... 300 grammes.
4. Ammonium Rhodanid ........................................ 2 kilog.
5. Benzatrone .................................................... 50 grammes.
7. Brucine ......................................................... 2 grammes.
8. Bentoxyzolan .................................................. Under consideration.
9. Hydroxylamin Muratic ...................................... 100 kilog.
10. Galactose ..................................................... 50 kilog.
11. Hydantoin .................................................... Under consideration.
12. Diphenylamin ............................................... 100 kilog.
16. P-Dinitro-Phenol .......................................... 50 grammes.
18. Isoamylamin ............................................... Under consideration.
19. Isonicotinic Acid .......................................... 25 kilog.
20. Laurie Acid .................................................. 10 kilog.
22. Acidum Pyrogallicum .................................... 200 kilog.
23. Ac. Trichloroactic ........................................ 120 kilog.
24. Kalinnoxalat ............................................... 50 kilog.
25. Kupferon ..................................................... 150 kilog.
26. Viola Crystalline ........................................... 50 kilog.
27. Acid Sulphanilic .......................................... 10 kilog.
28. Potash Iodelum ............................................. 50 grammes.
29. Kobalt Piro Vinogradny .................................. 50 grammes.
30. Potassium Tellurite ....................................... 0.5 kilog.
31. Litmus in Cubes ........................................... 150 kilog.
32. Laocond ....................................................... 100 kilog.
33. Laveulosa .................................................... 5 kilog.
34. Oil Cedar ..................................................... 500 kilog.
35. Methyl Violet ............................................... 50 kilog.
36. Carbamide ..................................................... 200 kilog.
37. Magnesium Chloride ..................................... 250 kilog.
38. Manganese Sulphate ...................................... 200 kilog.
### Section XI: Reagents—Continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.</td>
<td>Naphthalen—Alpha</td>
<td>50 kilog.</td>
</tr>
<tr>
<td>41.</td>
<td>Naphthalen—Beta</td>
<td>100 kilog.</td>
</tr>
<tr>
<td>42.</td>
<td>Naphtol-Sodium-Sulphonate</td>
<td>Under consideration.</td>
</tr>
<tr>
<td>43.</td>
<td>Sodium Dihydroxythionate</td>
<td>Under consideration.</td>
</tr>
<tr>
<td>44.</td>
<td>Sodium Alisarin-Sulphonate</td>
<td>5 kilog.</td>
</tr>
<tr>
<td>45.</td>
<td>Natrium Wolframate</td>
<td>5 kilog.</td>
</tr>
<tr>
<td>46.</td>
<td>Natrium Nitroprusside</td>
<td>10 kilog.</td>
</tr>
<tr>
<td>47.</td>
<td>Natrium Sulphurium</td>
<td>3 kilog.</td>
</tr>
<tr>
<td>48.</td>
<td>Natrium Oxalate</td>
<td>5 kilog.</td>
</tr>
<tr>
<td>49.</td>
<td>M-Nitro-Phenol</td>
<td>1 kilog.</td>
</tr>
<tr>
<td>50.</td>
<td>P-Nitro-Phenol</td>
<td>1 kilog.</td>
</tr>
<tr>
<td>51.</td>
<td>Ninhydrine</td>
<td>50 grammes.</td>
</tr>
<tr>
<td>52.</td>
<td>Natrium Stearate</td>
<td>10 kilog.</td>
</tr>
<tr>
<td>53.</td>
<td>Oropon</td>
<td>100 kilog. alternative offered</td>
</tr>
<tr>
<td>54.</td>
<td>Indol Oxide</td>
<td>Under consideration.</td>
</tr>
<tr>
<td>55.</td>
<td>Paranitrophenol</td>
<td>50 kilog.</td>
</tr>
<tr>
<td>56.</td>
<td>Permutit</td>
<td>1 kilog.</td>
</tr>
<tr>
<td>57.</td>
<td>Pentose Nucleotide</td>
<td>50 kilog.</td>
</tr>
<tr>
<td>58.</td>
<td>Palladium Sulphate</td>
<td>0.5 kilog.</td>
</tr>
<tr>
<td>59.</td>
<td>Palladium Bromum</td>
<td>0.5 kilog.</td>
</tr>
<tr>
<td>60.</td>
<td>Peloidin</td>
<td>Under consideration.</td>
</tr>
<tr>
<td>61.</td>
<td>Palladium Iodimum</td>
<td>0.5 kilog.</td>
</tr>
<tr>
<td>62.</td>
<td>Piperidine</td>
<td>0.5 kilog.</td>
</tr>
<tr>
<td>63.</td>
<td>Dichlorophenolinodphenol</td>
<td>200 grammes.</td>
</tr>
<tr>
<td>64.</td>
<td>Triacetonemid</td>
<td>25 grammes.</td>
</tr>
<tr>
<td>65.</td>
<td>Thymol</td>
<td>75 kilog.</td>
</tr>
<tr>
<td>66.</td>
<td>Thiopene</td>
<td>15 kilog.</td>
</tr>
<tr>
<td>67.</td>
<td>Phenylpropyl-Alcohol</td>
<td>10 kilog.</td>
</tr>
<tr>
<td>68.</td>
<td>Phenetole</td>
<td>25 kilog.</td>
</tr>
<tr>
<td>69.</td>
<td>Phenylidamine (Basic)</td>
<td>25 kilog.</td>
</tr>
<tr>
<td>70.</td>
<td>Phenolphthalein</td>
<td>1.8 kilog.</td>
</tr>
<tr>
<td>71.</td>
<td>Quinoxyl</td>
<td>200 grammes.</td>
</tr>
<tr>
<td>72.</td>
<td>Cholesterin</td>
<td>20 kilog.</td>
</tr>
<tr>
<td>73.</td>
<td>Eosin</td>
<td>300 grammes.</td>
</tr>
<tr>
<td>74.</td>
<td>Eukonogen</td>
<td>Under consideration</td>
</tr>
</tbody>
</table>

### Section XII: Homoeopathic Drugs

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Aurum Metal</td>
<td>100 grammes.</td>
</tr>
<tr>
<td>2.</td>
<td>Gold Potassium Iodide</td>
<td>40 grammes.</td>
</tr>
<tr>
<td>3.</td>
<td>Aurum Muriaat</td>
<td>20 grammes.</td>
</tr>
<tr>
<td>4.</td>
<td>Arsenic Iodide</td>
<td>2,000 grammes.</td>
</tr>
<tr>
<td>5.</td>
<td>Moschus</td>
<td>40 grammes.</td>
</tr>
</tbody>
</table>
Canadian Schedule of Supplies

Subject to the provisions of this Protocol, the Canadian Government offers in the following Schedule, for shipment during period July 1, 1944 to June 30, 1945, supplies totalling approximately 490,000 short tons, shipping weight dry cargo. It will be necessary for the Government of the Union of Soviet Socialist Republics to select, for shipment during the Protocol period a program which, together with other supplies to be shipped from the Western Hemisphere, does not exceed the shipping capacity to be made available from this area. The items which comprise the unshipped balance of the Third Protocol, amounting to approximately 100,000 short tons, are to be included in the selection.

It is appreciated that reasonable stockpiles of stores must be maintained, so that the Union of Soviet Socialist Republics can select cargo for shipment that is most needed to meet the ever-changing requirements of war. However, Canada reserves the right to limit the size of such individual stockpiles either by control of production or diversion of product, or both, when in its judgment such action is in the best interests of the common cause. In taking such action due consideration will be given to the expressed needs of the Union of Soviet Socialist Republics.

Except as specified, supplies for the Government of the Union of Soviet Socialist Republics from Canadian schedules will be made available as nearly as practicable in equal monthly instalments. The items in these schedules of supplies are offered subject to the ability of Canada to meet the specifications requested by the Union of Soviet Socialist Republics.

GROUP I.—Military

1. Lorries CZ2 .................................................. 5 units
2. Valentine Tank Spares ........................................ 6 sets
3. Early Warning Radar Sets ..................................... 5 units
4. Radar R.X.C. Spares ......................................... 10 units
5. Radar Equipment CDX (R.E.X.) .............................. 5 units
6. I.F.F. Equipment for G.L. Mk. III ........................... 13 units
7. Explosives .................................................. up to 10,662 short tons

Naval Equipment

1. Oxygen Producing Plants ................................. 20 units
2. Wooden Minesweepers ..................................... 5 units

155
GROUP II.—Metals, Etc.

1. Aluminum ingots ........................................ 21,000 short tons
2. Duraluminum
   (a) Rods ...................................................... 680 short tons
   (b) Tubes ...................................................... 120 short tons
3. Nickel ......................................................... 2,740 short tons
4. Ferro-tungsten ............................................. 150 short tons
5. Zinc .......................................................... 5,000 short tons
6. Alloy Steel ................................................... 16,159 short tons
7. Magnesium ..................................................... 1,000 short tons

GROUP III.—Railway Equipment

1. Flat Cars ...................................................... 1,000 units
2. Steel Rails .................................................... 41,900 short tons

GROUP IV.—Industrial Equipment

1. Machine Tools .............................................. up to $7,000,000
2. Hammersmith's and Press Equipment ..................... up to $4,000,000
3. Power and Electric Equipment ........................... up to $21,000,000
4. Miscellaneous Equipment .................................. up to $12,000,000

GROUP V.—Foodstuffs

1. Wheat and Flour (minimum) ............................... 199,000 short tons
2. Soya Bean Flour ............................................. 6,000 short tons
3. Rolled Oats .................................................... 10,000 short tons
4. Lard .......................................................... 10,000 short tons

GROUP VI.—Services

1. Ship repairs and servicing of vessels (as approved by
   Canadian Mutual Aid Board from time to time)

Estimated Tonnage of Fourth Protocol .................... 391,371 short tons
Unshipped Balance of Third Protocol ....................... 100,000 short tons
 (Estimated carry-over at June 30, 1944)
Total of the Estimates of Fourth Protocol Tonnage and
   of the Unshipped Tonnage of Third Protocol ............ 491,371 short tons