



ANNUAL REPORT
OF
THE PRESIDENT
FOR 1952

AIRCRAFT INDUSTRIES ASSOCIATION
OF AMERICA, INC.
Washington, D. C.

The following is the annual report of Admiral D. C. Ramsey, USN (Ret.), President of the Aircraft Industries Association. The report reviews operations for the fiscal year which commenced on November 1, 1951 and ended on October 31, 1952.

REPORT OF THE PRESIDENT

*For the Fiscal Year Ending
October 31, 1952*

TO THE BOARD OF GOVERNORS:

The Aircraft Industry has made signal progress during the last twelve months, especially in its principal responsibility of supplying military aircraft to the Armed Services. Operating under schedules less ambitious than those tendered it during the first year after the outbreak of war in Korea, the industry has maintained those schedules with very few exceptions.

In the 30 months since hostilities began in Korea, more than 15,000 military aircraft of all types have been delivered to our armed forces and our NATO allies. Of greater significance than total numbers is the fact that some 9,000 planes were delivered in 1952, compared to approximately 3,000 in 1950. The increase in monthly aircraft production rates further illustrates the rapid and substantial progress the industry has made in increasing its aircraft production. In June-July of 1950, military aircraft production was on the order of 215 planes per month; this rate had been multiplied by approximately 5 times in December of 1952—an annual rate of about 12,000 planes. Direct employment in the aircraft industry had risen above the 700,000 mark and totals about 1,000,000 counting subcontractors and suppliers.

The industry's position in relation to its schedules is due mainly to a major policy decision, made in late 1951 by the Department of Defense and the Office of Defense Mobilization. This decision was to postpone the achievement of a 143-wing Air Force and proportionate Navy air increase from 1954 to 1956. The Aircraft Industries Association position had been that, while its members could meet the original schedules, they could do so only by being accorded overriding priorities for materials, machine tool and manpower needs, which would have cut deeply into the supporting civilian economy.

There is prospect that the industry will continue during the coming year to fulfill its production schedules. I feel that it is important to point out once more, however, that the adoption of a long range aircraft procurement policy, before we were overtaken by an emer-

gency, would have permitted tremendous savings in both time and money-economies that could not be effected in the laborious process of rebuilding a seriously weakened industry. History has already proven on two occasions of unhappy memory, that industrial weakness is not only poor economy, but is actually an invitation to aggression. These facts were recognized by the President's Air Policy Commission and the Congressional Air Policy Board. It is considered a matter of vital national concern that such a program be adopted as a safeguard for world peace and the security of our nation.

Government Cooperation

I take pleasure in reporting that some of our difficult problems in these stressful and uncertain times have been alleviated, or show promise of alleviation, through the constructive and cooperative attitude of government services including particularly the Department of Defense and the Office of Defense Mobilization.

Among these were the suspension of price controls affecting our industry; the establishment of a Board to recommend a patent policy; the allowability of product liability insurance as an item of normal cost; the allowability of accelerated amortization as an item of cost in pricing; the more rapid conversion of letters of intent to definitive contracts; expedition of our facilities contracts; and cooperation in working out production refinements. Although this may appear to be a gratifying list of favorable trends in Government-Industry relationship, it is necessary to point out *that* many serious mutual problems await solution.

We are conscious of a sympathetic attitude on the part of the Secretary of Defense and the Chairman of the Munitions Board concerning the problems of our industry companies whose profit margins are far below the average of national industrial indices, and whose financial health is jeopardized in the face of emergency conditions.

Patent Policy

Largely as a result of representation made by the aircraft industry, which had suffered encroachments on its proprietary rights in contracts with the military services, the three services formed the Patent Policy Review Board to recommend policy on such matters. The President of AIA and leading executives of its member companies appeared before the Board in January of 1952 to present their

views and problems. Especial concern was expressed by the manufacturers over background patent clauses inserted in some military contracts.

The Patent Policy Review Board has completed its findings, and a report has been made to the secretaries of the three Services. The contents of the report are not yet known by the industry, since no copy has been made available to us. The Munitions Board also is reviewing the patent policy report and its Chairman has advised that our industry will be accorded the privilege of submitting recommendations on the revised draft before final Government action is taken.

Aircraft Profit Margins

From time to time during the year, representations have been made to cognizant authorities of the Armed Services showing inequities and inherent dangers in the low profit margins allowed under military contracts. Supporting our members' positions during the year have been certain impartial reports dealing with this matter. Also, the forty-third report of the Senate Preparedness Subcommittee of the Senate Armed Services Committee specifically recommended increased incentives for the industry as a means of insuring the nation a healthy, stable aircraft industry in peace, as well as in emergency.

Accelerated Amortization As Element of Cost

After many discouragements for the industry, which had made repeated efforts through the year to obtain implementation of DMO-11, allowing accelerated amortization (now termed "true depreciation") as an element of cost in contract pricing, the Munitions Board finally endorsed the allowance from a policy standpoint. All that remains before actual application is establishment by the Board of the modus operandi of the order.

Product Liability Insurance

After constant work by AIA staff and a hearing of member company representatives before the Insurance Advisory Committee of the Munitions Board, the allowability of product liability insurance premiums as items of cost was recognized by the Munitions Board, on recommendation of its advisory committee. However, it was provided that secretaries of the Military Services may substitute hold-

harmless clauses in certain contracts, where they are deemed more appropriate.

This policy reverses the earlier position of the Munitions Board that such liability belonged to the manufacturers, and that the cost of such insurance should come out of earnings. The industry argued that such insurance premiums should be regarded in the same light as any other insurance costs.

Armed Services-Industry Cost Reduction Program

AIA and its member companies have cooperated fully with the procuring agencies of the Armed Services in an intensive effort to reduce costs in the administration of contracts and the production of end items in the aircraft production program. This subject, in all of its ramifications, has been accorded constant attention by committees composed of company membership and by both the Industry Planning and Technical services of AIA. This work has also been reflected in direct applications, both by the military agencies and by contractor companies of AIA.

There is presently in preparation by AIA a booklet which will define the objectives of cost reduction and will give examples of results achieved to date. It will set forth means by which both our industry and the military services may continue these efforts. Work relating to the military aspects of this project has been undertaken at the request of the services. During the year, the AIA also issued a booklet, "Mr. Taxpayer Gets a Break," in which the work on Standards by the AIA in cooperation with the Air Force, Navy and the Society of Automotive Engineers was shown to have produced major results in cost reduction, with further and more significant results in prospect.

Off-shore Procurement

While approving in principle the government's new policy of placing an increasing dollar-value of aircraft production contracts with NATO country aircraft manufacturers, AIA and its member companies were gravely concerned over dangers inherent in administration of the program under the Mutual Defense Assistance Program.

Recognizing that valuable proprietary rights of this industry, the interests of American taxpayers and, ultimately, of American labor, might be at stake, the President of AIA made representations

to the Secretaries of State, Defense and Commerce, and to the Director of the Mutual Security Agency requesting proper safeguards of proprietary rights and of the future commercial markets of our aircraft industry.

Particular emphasis also was laid upon the tendency of MSA to by-pass the manufacturing, distribution and service channels long established by American aircraft manufacturers in foreign countries. Such agreements should not be made, it was contended, without consultation or agreement with American manufacturers.

The agencies concerned with this program have responded to the industry representations and are currently considering the problems outlined by the AIA with the Department of Defense acting as the coordinating body.

Turbine Transport Development

Progress of the British in both test and service operation of turbine-powered transport aircraft gave rise during the year to much Congressional and public speculation as to the possible position of the United States in future commercial aircraft markets.

Intended to resolve the differences between earlier measures proposed for direct government assistance versus company financing, Senator Edwin C. Johnson, Chairman of the Senate Interstate and Foreign Commerce Committee offered Senate Bill 3473 for hearing. This bill, based on a suggestion of the Chairman of the Civil Aeronautics Board, would have provided for government loans up to \$15,000,000 through the Department of Commerce to manufacturers for each approved turbine-transport development project.

Both regional Executive Committees of the Aircraft Manufacturers Council considered the bill and instructed the President to give testimony to the effect that it was a step in the right direction. This proposed legislation will undoubtedly be introduced in the Eighty-third Congress, and the President will arrange for individual companies to be heard on this measure when their wishes in the matter are known.

Public Law 867 on prototype testing will be in effect until September 1955, and it is possible that one or more of the prospective jet designs might take advantage of this law to offset some of the expense of type certification flight testing and accelerated service testing. PL 867 might have been utilized initially to obtain flight data and

simulated airline operational experience with B-45 type aircraft, but such a program is no longer considered appropriate or desirable.

Cost Allowances

Because of the extent and complexity of the Armed Services Procurement Regulations, and particularly the difficulties of the contractors in obtaining allowances of some normal costs of doing business under these regulations, the association requested its Legal and Accounting and Controllers committees to consider its future course in this respect. With the aid of these committees, the President will suggest measures aimed at obtaining a more equitable government policy under ASPR.

National Air Transport Coordinating Committee

The association has taken an active interest in the situation in the New York area resulting primarily from a series of aircraft accidents at Elizabeth, N. J., and the subsequent closing of the Newark Airport. All aviation interests concerned in the problem, which had serious implications for other urban areas over the nation, banded together to support the National Air Transport Coordinating Committee, of which your President is a member. The purpose of the NATCC was to study measures corrective of the conditions and practices which caused wide public concern, and to conduct a public information and education campaign to improve public attitude toward airports in the New York metropolitan area. Some progress has been made, and it is expected that the Newark Airport will be reopened under improved conditions, but the situation in the New York area remains serious.

Since noise is a considerable factor in the public relations situation surrounding airports, your President also has served, with other of the AIA staff, on the National Aviation Noise Reduction Committee.

Fiftieth Anniversary of Flight

The year 1953 will mark the fiftieth anniversary of powered flight, dating from the Wright brothers' success at Kitty Hawk, December 17, 1903. The great significance of this anniversary and the opportunity to call to public attention the tremendous influence this half century of aviation has had upon our nation and the world, is fully recognized by the AIA.

Accordingly, the Board of Governors directed support of the

Fiftieth Anniversary of Powered Flight Committee in its year-long nationwide plans. This committee will be made up of leading national and government figures under the chairmanship of Lieut. Gen. James H. Doolittle.

Administration, Finances, Membership

As the aircraft production elements of the defense program gained momentum, it became necessary to increase the staff to a total of 66 and to take even more space than contemplated last year.

While the budget for 1953 has not yet been approved, a figure about 7 or 8 per cent higher than that for 1952 will be recommended. However, increased sales have made it possible to make a substantial reduction in the rate of the additional dues.

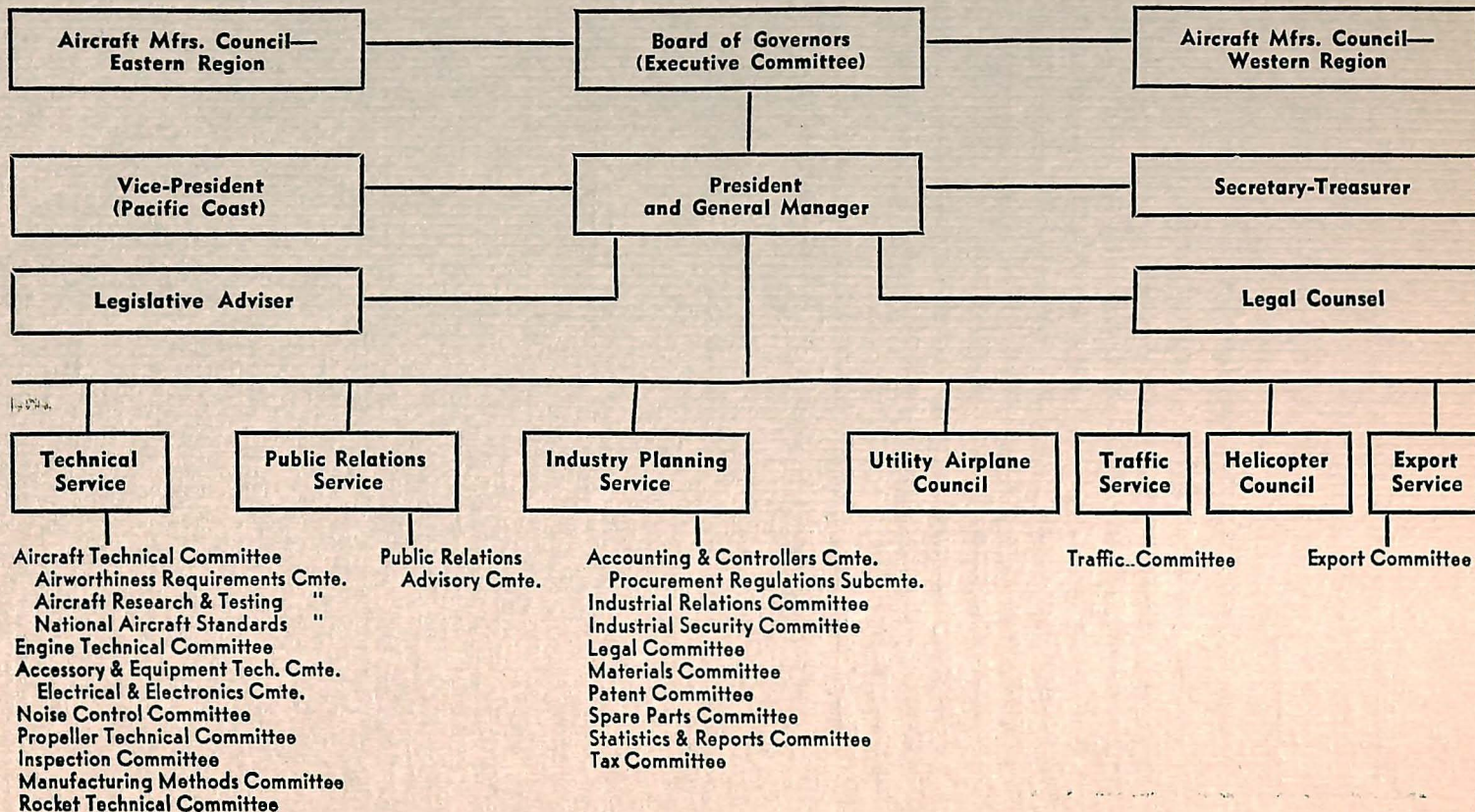
The past year has seen an increase of seven members in the manufacturing divisions, while the total of other divisions has remained unchanged.

The Treasurer will submit his report to the Board of Governors as soon as the financial records of 1952 have been audited.

Respectfully submitted,

D. C. RAMSEY

COMMITTEE ORGANIZATION OF AIRCRAFT INDUSTRIES ASSOCIATION OF AMERICA, INC.



REPORT ON OPERATIONS

For the Fiscal Year Ended October 31, 1952

SCOPE OF OPERATIONS

The Aircraft Industries Association is made up of 130 members, 112 of which are voting members and 18 of which are affiliates. The categories of voting membership are composed as follows:

	MEMBERS
DIVISION A—Manufacturers of aircraft, aircraft engines or airframes.	39
DIVISION B—Manufacturers of accessories, parts or materials used in aircraft construction or operation.	43
DIVISION C—Distributors or dealers in aircraft, engines, accessories, parts or materials.	30

The Association is organized under a Board of Governors and, regionally, under Eastern and Western Region Executive Committees of the Aircraft Manufacturers Council. The President is the chief executive officer. The work of the Association is carried out by staff assigned to seven services and by 22 Committees and two Councils, besides the Executive Committees. Each Committee is made up of member-company representatives chosen for their special knowledge and experience in the various fields of industry interest and activity. The Services, Committees, and Councils are as follows:

Public Relations Service

Public Relations Advisory Committee

Industry Planning Service

Accounting and Controllers Committee

Legal Committee

Materials Committee

Statistics and Reports Committee

Spare Parts Committee

Patent Committee

Industrial Relations Committee
Security Committee

Technical Service

Aircraft Technical Committee
Airworthiness Requirements Committee
Aircraft Research and Testing Committee
Noise Control Committee
National Aircraft Standards Committee
Accessory and Equipment Technical Committee
Engine Technical Committee
Inspection Committee
Manufacturing Methods Committee
Propeller Technical Committee
Rocket Technical Committee

Traffic Service

Traffic Committee

Export Service

Export Committee

Utility Airplane Council

Helicopter Council

During the year, AIA has concerned itself with all industry-wide aspects of aircraft development and production. It has maintained close liaison with the Armed Services and all other government agencies dealing with aircraft rearmament. It has maintained vigilance of legislation and government regulations affecting the industry. It has dealt with many aspects of civil aircraft production.

Through its various Services and Committees, the Association has represented the industry's interests in numerous ways. It has worked out general and technical problems peculiar to the industry, and has dealt with common problems of the industry and the government.

Reports on the operations of the several Services and Committees are contained in the following pages.

PUBLIC RELATIONS SERVICE

The public relations activities of the Association have been greatly intensified during the last year to meet the heavier demands incident to the rearmament program.

Public interest and anxiety have heightened with the stalemate in Korea and the ever-present threat of world conflict. There has been alarm that potential enemies are farther advanced than America in the materials of war, especially aircraft. And withal, there has been manifest inquisitiveness about the higher cost of modern combat aircraft incident to greater performance and greater complexity.

The importance of a clear public understanding of the progress and problems of the industry was recognized by the Board of Governors last winter when it directed that the public relations program be intensified.

Public Relations Advisory Committee

There have been two meetings of the national committee and two meetings of each of the two regional committees during the last year. At each of these, the public relations program has come under review. It was upon the recommendation of the national committee that the decision to expand the program was reached.

The committee also met with public information officers of the Armed Services in order to establish a better working basis in the cooperative programs of the Services and the Association.

Information Service

There has been an ever-increasing demand upon this service during the year. Direct inquiries have multiplied in the Washington, New York and Los Angeles offices. The New York service was reorganized to improve and extend its distribution of industry information.

The amount of informational material, in the form of releases, background memoranda and scripts has been stepped up. A special service to radio and television outlets was instituted during the year. The service also has aided editors and writers in developing numerous special articles for publication in newspaper, feature services and magazines. Much material has been provided Government offices and members of Congress.

Publications

PLANES, the official publication of the Aircraft Industries Association, was published monthly throughout the year. Previously it had been on a bi-monthly schedule.

The publication has reflected the industry's policies and problems

and has reported on the progress of the aircraft program. It has printed articles, signed by Government leaders, dealing with the air power program. It had dealt frequently with the urgency of cost reduction. Editorially, it has presented the Association stand on matters affecting both the military and civil production programs.

The AIRCRAFT YEAR BOOK, the standard reference book of American aviation for the last thirty-four years, again showed an increase in circulation during the year. The 1953 edition, which will be dedicated to the fiftieth anniversary of powered flight, is well advanced and will be issued early in the coming year.

One booklet, "Mr. Taxpayer Gets a Break," dealing with the reduction of costs through a cooperative cost-reduction program, was issued. Two other booklets are in preparation and another is scheduled for publication early in 1953.

CURRENT TRENDS, the Association's weekly newsletter to its members, reported throughout the year on Washington and national events and developments of interest and concern to its recipients.

Speeches

Recognizing the need for articulateness in clarifying the industry's objectives, achievements and problems, many of the industry's top executives volunteered during the year to appear on national platforms before audiences of leaders in various fields. The Public Relations Service was called upon to supply supporting data for these efforts.

Not only did these speeches have excellent effect on the primary audiences, but they received wide circulation by the public press and radio-television commentators.

Research and Statistical

While the Research and Statistical Service was expanded during the year under the Industry Planning Service, for the benefit of the entire Association, its improved operations were of considerable value to the intensified public relations program. It is expected that this service will be of even greater value during the next year.

Cooperation With National Organizations

As it has done in the past, the Public Relations Service has cooperated with other national organizations, as well as with Govern-

ment departments. It has continued to supply aid and information to the American Legion in its continuing program in behalf of adequate air power, and it has assisted in publication of the LEGION AIR REVIEW, the monthly publication of the Aeronautics Committee of the National Security Commission.

Studies also have been made in conjunction with the National Aviation Education Council, a member of the National Education Association, of possible means of improving knowledge in the schools of the social, economic and security influences of aviation on the nation and the world.

INDUSTRY PLANNING SERVICE

The activities of the Industry Planning Service embrace one of the broadest fields of AIA staff operations. It concerns itself with the financial, legal and general procurement problems of the aircraft industry. It also deals with industry problems of personnel, industrial relations, materials, facilities, supplies, spare parts, security, patents, reports and statistics.

The Service has been sensitive throughout the year to legislation, regulations and decisions which have prompted industry concern within the above areas.

For expeditious presentation of problems peculiar to aircraft production, close relationship has been maintained with all Government agencies charged with responsibilities affecting production. These are the Munitions Board, Aircraft Production Resources Agency, Defense Production Administration and the Aircraft Production Board.

In cooperation with the Air Materiel Command and the Navy Bureau of Aeronautics, the Service has spent much time and effort in advancing the objectives of cost reduction in all phases of the aircraft production program.

Cut-backs in production schedules incident to the so-termed "stretch-out" called for a new appraisal of production potentials and materials availability. While these cut-backs served to ease some critical situations, they also created additional unforeseeable problems.

Machine tool production was accelerated through a combination of recognition of, and attention to, the peculiarities and needs of that industry.

The suspension of price controls substantially reduced the sub-

contracting and vendor procurement problems, and likewise reduced the industry's paperwork on its purchases and its sales.

Labor unrest was manifested in longer and more difficult contract negotiations and in discussion of new Walsh-Healey Act determinations, even though average wages of this industry rank high among national averages. The effects of strikes in other industries, notably in steel, were felt in production and procurement in our industry.

Detailed treatment of the activities of all Industry Planning committees is set forth under the following appropriate headings:

Accounting and Controllers Committee

This committee concerns itself with the numerous problems affecting the financial management of the aircraft industry. It has been particularly concerned with the procurement policies of the Government. Through the Procurement Regulations Subcommittee, it has participated in the coordination of various Department of Defense directives and regulations on this subject and certain Army, Navy and Air Force directives which implement the over-all procurement policies. This committee has also been concerned with problems relating to renegotiation and taxes.

ACCELERATED AMORTIZATION as an item of cost in contract pricing. This committee has worked with the Department of Defense, Office of Defense Mobilization, and Defense Production Administration on the ramifications of the policy covering accelerated amortization as set forth in DMO No. 11.

Following the subsequent issuance of an amendment to DMO No. 11, the Department of Defense prepared and released to Industry a draft designed to implement the policy of allowing accelerated amortization as an item of cost in contract pricing. This draft was not considered satisfactory by the Industry. Numerous conferences were held with Government personnel and an improved draft was submitted to Industry for further review and comment which has been accomplished. The legal aspects of this problem were also coordinated with members of the AIA Legal Committee.

The ultimate question of implementation of DMO 11 is still pending before the Munitions Board and the Military Services.

ACCELERATED AMORTIZATION under renegotiation—the Eberharter Bill (H.R. 3733, 82d Congress). The committee devoted considerable time to studying the various ramifications of the pro-

posal which would disallow accelerated amortization as a cost for purposes of renegotiation. Particular attention was given to the effect upon renegotiation of the policies expressed in DMO No. 11 and as subsequently amended. The subject was also discussed on numerous occasions with Government officials, and factual information was prepared and submitted for use as a basis for maintaining the status quo regarding the treatment of accelerated amortization for purposes of renegotiation. The Second Session of the 82d Congress adjourned without acting on this measure.

PRODUCTS LIABILITY. During the last year, numerous discussions were held with Government personnel with a view to obtaining a reversal of the policy regarding allowability as a contract cost of premiums for product liability insurance. The Munitions Board had established as a procurement policy, by its directive of December 8, 1951, that "Expenditures for products liability insurance should not be allowed in connection with contracts for the manufacture of aircraft", and also that such contracts should not contain a hold-harmless clause.

In view of the legal questions involved, this subject was also of great concern to the Legal Committee, which collaborated with the Accounting and Controllers Committee in arriving at a satisfactory plan for the presentation of the industry's position to the Munitions Board. At its meeting on November 13, 1952, the Munitions Board authorized the allowance as a cost, in contract pricing and as a reimbursable item under cost-reimbursement type contracts of expenditures for products liability insurance. At the same time, the Munitions Board adopted a policy of prohibiting the use of hold-harmless clauses, except when authorized by the Secretary of the respective military service.

ACCOUNTABILITY FOR GOVERNMENT PROPERTY. During the year the committee worked with Government personnel, both at Wright Field and in Washington, in connection with the problems arising from the application of Section XIII of the Armed Services Procurement Regulation and Appendix B thereof. Directives issued as implementations of these provisions of the Armed Services Procurement Regulation are being coordinated with the Army, Navy and Air Force prior to issuance. These directives are continuing problems,

and discussions will continue to be held with Government personnel concerned.

COST PRINCIPLES FOR FIXED-PRICE CONTRACTS. The committee is still concerned with the problem arising out of the fact that the three Services are required to use the CPFF contract cost principles (ASPR Section XV) as guides in the negotiation and ultimate pricing of articles purchased by the Government under fixed-price contracts. Pending the issuance of the cost principles for fixed-price contracts, and effort is being made to have the Munitions Board adopt, as an interim policy, the use of the cost principles set forth in Section VIII of the Armed Services Procurement Regulation (Contract Terminations). New problems will continue to arise in the coordination of a separate set of cost principles for fixed-price contracts.

CONTRACT TERMINATION. Through the Procurement Regulations Subcommittee, the committee continued to work with the three Services in the coordination of Section VIII of the Armed Services Procurement Regulation. Section VIII deals with the policies and procedures covering the settlement of terminated contracts, including the disposition of excess inventory. Section VIII was issued during the early part of this year. The departmental implementations of this section are being coordinated. As originally prepared, such implementations varied in style and treatment of the problems. At the request of Industry, publication of these departmental implementations is being withheld until coordinated through the Munitions Board.

DISPOSITION OF RECORDS. Several meetings have been held during the year with Government personnel concerning the problems incident to retention and disposal of contract records, particularly those pertaining to World War II contracts. In view of the position of the General Accounting Office and certain legislation on the subject, this is a continuing problem and will require further discussion with Government personnel.

PRICE REDETERMINATION. The differing policies of the three Services with respect to the type of price-redetermination clauses to be used in fixed-price contracts has received consideration during the last year. This also is a continuing problem, and it is contemplated that any new clauses proposed by the three Services will be referred to Industry for review and comment prior to their issuance.

LETTERS OF INTENT. This committee has been concerned with problems resulting from the delays in arriving at definitive contracts. Several conferences on this subject were held with Government personnel. Primarily through the Procurement Regulations Subcommittee, this committee has endeavored to obtain a more acceptable termination article for use in letter contracts. Discussions of this matter with Government personnel are continuing.

DISPUTES CLAUSE. Though the situation which grew out of the decision of the U. S. Supreme Court in the so-called *Wunderlich* case was primarily a problem for the Legal Committee, it was also of considerable concern to the Accounting and Controllers Committee. (Further detailed treatment of this subject is set forth under the Legal Committee section of this report.)

CPFF CONTRACT CLAUSES. This committee, through the Procurement Regulations Subcommittee, and in collaboration with the Legal Committee, is still engaged in coordinating with the Munitions Board a proposed amendment to Section VII of the Armed Services Procurement Regulation which deals with contract clauses for cost-reimbursement type contracts. This proposed amendment to ASPR Section VII is now in the final stages, though further conferences with Government personnel are contemplated.

RENEGOTIATION. This committee reviewed and commented on the proposed regulations of the Renegotiation Board under the Renegotiation Act of 1951. Discussions were held with members and staff personnel of the Renegotiation Board regarding such regulations, prior to issuance. Though the regulations have been issued, the administration of that authority is a matter of continuing concern to the Industry.

SUBCONTRACTORS. This committee has dealt, and will continue to deal, with the problems of subcontractors, particularly those incident to liability for Government property, financing, contract terminations, and disposal of inventories.

OTHER PROBLEMS. Other problems handled by this committee which affect the financial management aspects of the aircraft industry are license and technical assistance agreements, bailments, defense loans, bonds and insurance, war damage insurance, pension and retirement plan costs, the National Defense Projects Rating Plan, civil

defense costs, security matters, assignments of claims, profit on over-time premiums, and engineering change procedures.

Legal Committee

PRODUCTS LIABILITY INSURANCE. During the past year, one of the major problems of this committee has been the liability of aircraft manufacturers for product failure and the protection required as a result. In cooperation with the Accounting and Controllers Committee, numerous meetings were held with Government personnel with the view to having adopted by the Department of Defense a procurement policy which would allow premiums for products liability insurance to be treated as a cost in contract pricing. At a meeting of the Munitions Board on November 13, 1952, such a policy was adopted. (For a more detailed discussion of this subject, see the section of this report on the activities of the Accounting and Controllers Committee).

DISPUTES CLAUSE. This committee also worked with the Accounting and Controllers Committee in connection with securing an amendment to the standard disputes clause in Government supply contracts which would permit judicial review of departmental findings of fact in cases which the contractor believed were "fraudulent, arbitrary, capricious, or so grossly erroneous as necessarily to imply bad faith." The need for such an amendment resulted from the decision of the Supreme Court in the *Wunderlich* case to the effect that a departmental decision regarding a question of fact is final, even though arbitrary, capricious, or grossly erroneous, since this did not constitute the type of conduct which would justify a judicial determination that the departmental decision was fraudulent.

The desired amendment to the standard disputes clause was finally adopted by the Department of Defense after considerable delay caused by efforts on the part of other industries to secure legislation from Congress on the subject. A bill with respect to this matter almost became law.

Certain provisions of the bill were considered to be objectionable by the aircraft industry. A series of circumstances resulted in the failure of this bill to be enacted.

OTHER PROBLEMS. In cooperation with the Accounting and Controllers Committee, the Legal Committee has been engaged in work on the proposed clauses for use in cost-reimbursement type

contracts and also the avoidance of delays in arriving at definitive contracts. It has also been concerned, in collaboration with the Accounting and Controllers Committee, with legal liability under bailments, the problems of subcontractors, and the retention and disposition of records. Committee activities have embraced the legal ramifications of allowing accelerated amortization as a cost in original pricing as well as under the Renegotiation Act. It has also dealt with the Government's claim to license fees for inventions developed as a result of the performance of Government contracts.

Materials Committee

The activities of the Materials Committee have been in connection with the obtaining of materials required to meet defense and non-defense production schedules. During the steel and oil strikes, satisfactory provisions were made to permit uninterrupted production in the aircraft industry. Satisfactory contacts have been maintained with all Government agencies for obtaining prompt action on all materials problems. Meetings have been held with the Aircraft Production Resources Agency, The Munitions Board, The National Production Authority, and the Defense Production Administration for the purpose of reducing to a minimum the reporting procedures required by various Government agencies.

This committee has assisted the Air Force and BuAer in their efforts to distribute a considerable amount of subcontract work to small business. The committee likewise has cooperated with the Air Force in the prosecution of a cost reduction program.

With the probability of abandonment of the CMP in mid-1953, this committee has worked with all of the Government agencies involved, requesting that proper procedures be inaugurated at that time to insure delivery of all materials needed for scheduled production in this industry.

AIRFRAME REQUIREMENTS. The Aircraft Production Resources Agency attempted to work out a new method for computing material requirements to reflect actual needs of industry by calendar quarters for each commodity-form and major-shape classification of material, which will be acceptable to the Munitions Board and the civilian control agencies. This should produce reasonably accurate

estimates and also necessary safeguards against abuse by individual firms or Government units.

An Airframe Subcommittee of the Materials Committee was appointed to review and study APRA's recommendations.

CRITICAL MATERIALS FOR ENGINES. Efforts were made to develop a proper method of reporting critical alloys required by the engine manufacturing companies. The Engine Subcommittee met with members of APRA, the Munitions Board and DPA in an effort to determine a uniform method of reporting which would be acceptable to industry and all Government agencies. No definite agreement has been reached.

It is indicated that the needs of APRA are now being adequately filled by the receipt of Summary Bills of Materials and APRA Form 5's. Therefore, no further meetings are contemplated.

ADVANCED ORDERING. The AIA was requested by APRA, after it had completed a review of the aircraft companies' ordering programs, to have the companies take advantage of and increase the percentage of advanced ordering wherever possible. APRA requested this in order to justify its request to the Munitions Board and DPA for increased advanced allotments of material. It was pointed out by many of our companies that they had not been able to take complete advantage of this program due to the fact that our stretched-out production programs left them in some instances with abnormally high inventories, and changes in the aircraft and production programs have been so numerous that they were unable to place firm orders for the full amount of their advanced allotments. An effort is being made to aid APRA on this matter.

EARMARKED WAREHOUSE STOCKS. APRA submitted a proposed program to industry on earmarked warehouse stocks (reserve stocks) and a redistribution plan. Action has been held in abeyance on earmarked warehouse stocks. It is likely this proposal will be shelved, because it is generally felt these stocks are not required at this stage of the present mobilization program. Regarding the redistribution plan, the House Subcommittee on Executive and Legislative Reorganization held hearings at which the Air Force proposal on the redistribution plan was submitted. The proposed plan covered only Government-owned materials in the contractors' plants, and as this represented a very small percentage of the idle and excess inven-

tories, it was felt by the industry that the cost of putting this plan into operation at this time would not be justified.

DECONTROL. With the general easing of the materials situation, decontrols have been a matter of considerable concern to our industry. The subject has been discussed in meetings with APRA, and a letter has been forwarded to the Munitions Board by APRA requesting that, in the event of early decontrols of Controlled Materials, some procedure be established whereby materials requirements of the aircraft industry be given preferential treatment to enable meeting required defense production schedules. The Defense Mobilization Director has stated that controls will probably continue in effect until June 30, 1953, due to power shortages affecting aluminum production and the steel strike.

MACHINE TOOLS. A study by APRA indicated that there have been large scale cancellations (over 24,000) of machine tools since March 1, 1952. APRA's plan is to continue to purchase all machine tools which are covered by their contracts, and they have asked the companies to furnish a report showing a brief explanation of the reasons for these cancellations. Action has been taken by APRA to dispose of this subject.

CRITICAL SHORTAGE REPORTS. The forms for reporting critical shortages have been under study by this committee. Recommendations were submitted to APRA. There is feeling in this industry that the present system still requires simplification. The problem is still under discussion.

MATERIAL CONSERVATION. This committee collaborated with the AIA Technical Service in presenting this problem to the Conservation Committee of the Iron and Steel Division of NPA. NPA and DPA feel greater efforts should be made by aircraft engine producers in type testing of substitute steels due to the limited availability of nickel and other critical alloys.

OIL STRIKE. Exemption was obtained for the aircraft industry from PAD Form No. 6 (Petroleum Administration for Defense). This permitted the aircraft companies to obtain all of the aviation fuel required for defense operations.

STEEL STRIKE. After meetings with staff members of the AMC, the AIA suggested conservation of steel stocks with DPA and the

Munitions Board to enable finished steel to be released from steel producers' warehouses. A procedure was established to give top preference treatment to aircraft steels at the conclusion of the strike.

TITANIUM. This committee has worked with members of APRA, the Air Force and the Light Metals Division of NPA on further development of titanium for aircraft use. A policy is now being developed at the AMC to determine the percentage of the excess costs involved in using titanium over the current production material.

Statistics and Reports Committee

The increased demand from many sources for new and more detailed reports from the industry has caused the committee to assume during the last year an even more active role in the field of reports control than in the past. This increased activity has brought with it closer contact with and better cooperation from the Bureau of the Budget, the Air Force, the Bureau of Aeronautics, the Bureau of the Census, the Bureau of Labor Statistics, and the Research and Development Board. Some of the reports upon which the Committee took action during the year were:

1. *Report of Undelivered Industrial Equipment (AMC-245)*

AIA objections and recommendations on the original AMC request resulted in issuance of a simplified directive. Provision requiring certification of subcontractor requirements by primes was eliminated completely from the revised instruction.

2. *Consolidated Monthly Report of Accrued Costs; Spare Parts Consumption, Balance and Cost Report; Maintenance Performance Report.*

The committee position that these three reports are duplicatory and unnecessarily detailed has brought about the scheduling of a Government-Industry meeting. Indications are that at least one report will be eliminated, and those remaining considerably simplified.

3. *AEC Material Requirement Reports*

As a result of committee action, the Bureau of the Budget has ruled that these reports fall within cognizance of the Federal Reports Act. Advisory Council on Federal Reports will call a general industry meeting in the near future in which AIA will

participate. Due to similarity of these reports with DPA materials reports, elimination of duplicatory reporting is a hoped-for goal.

4. *Census of Manufactures*

The committee is assisting the Bureau of the Census to develop a questionnaire for 1953 that will provide meaningful data with minimum burden to our companies. Indications are that AIA representations will result in the inclusion of guided missile data in aircraft field, rather than in ordnance category. Negotiations are still in the process.

5. *Plant Facilities Report (NavAer 2627)*

The committee directed the attention of the Bureau of Budget to an apparently unauthorized requirement for completion of this report by Industry. Budget's fact-finding preliminary check is now in process.

6. *Supplement to the Report on Employment, Payroll, and Hours (BLS 790 C-1)*

Several unsuccessful attempts were made by the Committee to have the report discontinued. Despite failures in this regard, minor success has been attained in securing an easing of the reporting instructions insofar as the aircraft industry is concerned. Presently, in process is a new attempt to effect complete elimination of this report.

7. *RDB Survey of Industrial Research and Development*

Industry recommendations resulted in minor revisions in the RDB proposed form. Despite revisions, the resultant form was still unsatisfactory to the industry. However, committee negotiation resulted in an easing of the reporting instructions.

During the year, the AIA played a leading role in those meetings of the Air Coordinating Committee's Working Group on Aircraft Statistics called to examine the general problem of duplicatory reporting of employment data by the aircraft industry. Agreement was ultimately reached that the Bureau of Labor Statistics would be the only government agency collecting such data.

At the request of the committee, the Air Materiel Command and the Bureau of Aeronautics have recently undertaken a joint study aimed at the development of a revised and useful engine and propeller

AMPR (Aeronautical Manufacturers Planning Report). The present reporting system in two years has produced little meaningful information. Cooperating closely with these efforts, the committee is presently readying a recommended reporting system for submission to the AMC.

In addition to the seventh issue of the "Financial Situation of the Airframe Manufacturing Industry," and several special studies, the Service continued publication of the series on civil aircraft shipments, labor turnover, and average hours and earnings. Also completed during the year was the basic research on an AIA booklet on "Cost Reduction" scheduled for release early this coming year.

Spare Parts Committee

This committee has continued to maintain an active relationship with the Military Services and those divisions of the Munitions Board and the Aeronautical Standards Group having cognizance of the supply, maintenance and procurement matters concerning aeronautical spare parts. However, the most important single item of progress to be reported for the past year is the close coordination which was established with the Air Materiel Command. Some of the principal projects given attention by this committee during the year were:

COST REDUCTION PROGRAM. The committee made various recommendations to the Air Force for reducing costs, primarily in connection with the paper work processing of spare parts orders, including catalogues, technical data and spare parts provisioning procedures. Some of these recommendations were accepted by the Air Force; some were rejected, and others are still under consideration. The most important suggestion which was accepted by the AMC was that the spare parts catalog, known as Provisioning Parts Breakdown, be reduced in size so that only parts having maintenance significance will be included. Aside from the economies effected in the preparation of the initial catalog, much greater economies will result from the reduced amount of paper work by contractor and Government personnel in connection with the design changes which occur throughout the life of the contract.

DECENTRALIZATION OF AMC. The committee has worked with the AMC in connection with the later stages of the decentralization program and has made recommendations, some of which have been accepted by the AMC. The most important of these recom-

mendations was that the interim program initially provided for should be eliminated so that the decentralization could be accomplished in one major step. Another caused the decentralization of procurement operations on the call contracts under which replenishment spare parts are ordered. In both cases, the route and the handling time for Government/Contractor paper work and decisions are reduced appreciably.

PROVISIONING PROCEDURES. The proposed Munitions Board spare parts provisioning procedure known as Case 55, received some attention during the year, but due to unresolved questions involving the policies of the military services and of different industries, Case 55, has not been finalized. Therefore, Case 57, modelled after Case 55, and pertaining to training equipment provisioning, is also still incomplete. However, the committee gave considerable attention to the Air Force version of Case 55 known as MCP 71-649 and recommendations for further improvement of the document.

The committee furnished recommendations to the Munitions Board, to the Aeronautical Standards Group, and to the Services on a number of proposed specifications, and it has others under consideration at the present time. The activity in the spare parts field has been at a high level during this year and every indication is that it will continue. The staff endeavors to keep the committee members informed of legislation, Department of Defense directives, military service directives, press releases, price control regulations and any other news pertinent to spare parts operations.

Patent Committee

On November 15, 1951, the Departments of the Army, Navy and Air Force established the Armed Services Patent Policy Review Board, to review all phases of patent policy and matters relating thereto, and to submit recommendations to the Secretaries as to what new patent policy, or changes in existing patent policy, are in the best interest of the national defense. The Board thereupon extended an opportunity to any and all persons to present pertinent information or suggestions.

A hearing for the membership of AIA to express itself verbally was held on January 17, 1952. Many chief executives of AIA member companies appeared and gave testimony. The Patent Committee developed an appendix, which was also submitted to the Board, con-

taining detailed recommendations, particularly with reference to proposed revisions of the Armed Services Procurement Regulation, Section IX, Patents.

The Patent Policy Review Board, after hearing other industry groups and studying voluminous written material which it received, issued its recommendation on August 20 to the Secretaries of the Army, Navy, and Air Force. Subsequently, the Munitions Board took cognizance of this matter and is currently reviewing the report. Industry's request for a copy of the report has not yet been granted.

ASPR AND PATENT LEGISLATION. The Patent Committee has also made specific recommendations to the Munitions Board regarding several Munitions Board proposed revisions of the Armed Services Procurement Regulation, Section IX, Patents. These were 9-103, Reporting of Royalties and 9-202, Copyright Clause. The Munitions Board has not yet made known its decisions on these two proposed revisions.

The committee reviewed all of the patent legislation introduced in Congress which is of interest to the aircraft industry. Upon invitation from the Patent Subcommittee of the House Judiciary Committee, a member of the AIA Patent Committee testified in public hearing on legislation introduced relative to Peacetime Royalty Adjustment on military procurements.

During the year, Congress passed laws on which the Patent Committee had made recommendations from time to time as previous bills had been introduced. The principal laws passed were the Codification and Revision of the Patent Laws, the Invention Secrecy Act of 1951 and the Emergency Powers Continuation Act which, among other things, extends the War-time Royalty Adjustment Act.

The committee also reviewed several Government-proposed policies with respect to awards to Government employee inventors and with respect to foreign protection on Government patents. On the latter, the committee's views were made known to the Government by virtue of the continued representation by a member of the AIA committee on an Industry Advisory Committee established by the State and Commerce Departments. The representative has also participated as an Industry-Advisory Committee member in the continued review of proposals of policies involved in this industry's proprietary rights under International Interchange of Technical In-

formation. In this general field, the Patent Committee and the Export Committee have worked closely together.

Price Control

The Association supported the Military Services and the Munitions Board in their request to the Office of Price Stabilization for elimination of price control on aeronautical items. The OPS recognized the difficulties of endeavoring to regulate prices of this industry. On December 19, 1951, the Office of Price Stabilization suspended price control on sales of aircraft and aircraft parts. This suspension included military, commercial and personal aircraft. It also included aircraft parts, including all components, parts, subassemblies, adjuncts and accessories of aircraft (except tires and tubes) which are designed for use exclusively as aircraft parts and which have been machined or fabricated so as to permit use only in the manufacture, modification or maintenance of aircraft.

This action was welcomed by the industry as being of immeasurable help toward the achievement of production goals and the elimination of much unnecessary paper work. The Association and its members are aware that this suspension can be discontinued by the OPS at any time, and that it is important that the industry continue to observe the spirit of price control so that there will be no reason to consider discontinuance. It is evident that the industry has cooperated fully in the objectives of the OPS.

The Association has had the advice of the small ad hoc Price Control Committee which was established earlier, in the review of and recommendations on several OPS and Munitions Board proposed regulations and revisions thereof, relating to price control. The staff continues to review all new price control regulations and to keep the membership informed of those of particular significance to this industry.

Industrial Relations Committee

The continuation of wage and salary controls, coupled with expanding employment in our industry, has made the past year one of greatly heightened activity for the committee.

WAGE AND SALARY STABILIZATION. Many member companies have had petitions processed by the Wage and Salary Boards during 1952. AIA contacts with both Boards, established through

committee members and staff, have been of material assistance in expediting a number of these wage petitions. These contacts also have provided a means by which industry members of the Wage Board could be kept advised of the stabilization problems within the aircraft industry. For the greater part of the year an AIA staff member served as a member of the Review and Appeals Committee of the Wage Stabilization Board. AIA staff members also have furnished member companies prompt information on new stabilization policies and procedures.

MANPOWER. While the stretch-out of production schedules has alleviated our manpower problem insofar as ordinary categories are concerned, our industry still has great need of skilled technicians and engineers. With the aid of company-furnished statistics, AIA staff has made continuous effort to keep manpower officials in all interested Government agencies currently informed as to our needs. These agencies include the Department of Defense, Office of Defense Mobilization,, Defense Manpower Administration and Selective Service.

The loss of manpower through the recall of reservists has been reduced to the point where it is balanced by reservists returning from military service.

For the most part, Selective Service policies in connection with deferment of engineers have worked out with a minimum of injury to our companies. A general tightening of deferment policies is indicated for the coming year due to increased quotas to be furnished by Selective Service.

WALSH-HEALEY ACT. On March 8, 1952, the Public Contracts Division of the Department of Labor published notice of its intention to issue a revision of the regulations governing the administration of the Walsh-Healey Act. A hearing was set for June 10, 1952. The committee, with the assistance of counsel, began the preparation of a brief covering the aircraft industry's objections to the proposed regulations. The AIA staff joined with other industry organizations in the dissemination of information aimed at alerting all industry to the dangers inherent in the proposed regulations. At the same time the staff acted to have the Public Contracts Division re-confirm the 1940 "Walling Letter," granting exemption to the suppliers of aircraft manufacturers. On May 15, 1952, the Public Contracts Administrator wrote AIA giving a re-confirmation. On May 28, 1952, Labor

Secretary Tobin announced that due to the volume of vigorous protests, the scheduled hearings were indefinitely postponed. The committee is completing its brief in the event the issue is reopened.

SURVEYS. As in past years, surveys have been conducted covering wages, fringe benefits, engineering practices and policies and other matters. Through committee meetings and staff service, there has been a free exchange of industrial relations ideas and problems as they affect our industry.

Security Committee

Throughout the year, the Security Committee has worked in cooperation with the Industrial Security Division of the Munitions Board in an effort to produce a set of standard regulations applicable to all activities of the Department of Defense. Recently, the Munitions Board approved a program to develop and issue such regulations. Under the new policy, one series of Industrial Security regulations will apply to all the military departments, as well as to all industry in which the Department of Defense has or contemplates contractual relations. This will eliminate confusion presently existing between military representatives and management arising out of varying interpretations of policy.

Members of the Security Committee and an AIA staff member have represented the industry on the task group appointed by the Facilities Protection Board to write the Aircraft Supplement to the Facilities Protection Board's manual, "Principles of Industrial Security." This manual is in its final draft stage.

TECHNICAL SERVICE

AIA has continued to provide industry assistance to the Military Services through the coordinated action of engineering, inspection and manufacturing committees representing the airframe engine, propeller, equipment, rocket-engine and guided-missile manufacturers. Such assistance to the Military has resulted in a better understanding of the industry's technical problems and increased emphasis is being placed on Government-Industry coordination procedures.

Additional progress can and should be made, however, by more concerted efforts to develop policies, and to outline specifically the area of industry's responsibility for developing, designing and pro-

ducing military equipment. Areas that need policy attention are (a) development research and testing; (b) specifications for materials and processes, and (c) standardization of component parts. Coupled with this is an important need to establish complete "weapons system analysis" as a joint Military Service-Industry endeavor and a need to promote the greater use of functional and performance requirements for Services' procurement purposes.

HEAVY PRESS PROGRAM. Under sponsorship of the AIA, a meeting of the country's aircraft manufacturers, forging producers and press builders was held in Santa Monica on December 4, 1951.

To emphasize to aircraft designers the need for immediate study of large forging potentialities so that there will be no delay in utilization of the heavy presses when put into operation.

To emphasize to the forging operators the need for better techniques to realize minimum tolerances, draft angles and forged thicknesses.

To emphasize to the press builders the need for standardization to avoid aircraft production stoppage through lack of interchangeability of press component parts.

The AIA, at the request of the Office of the Undersecretary of the Air Force, completed a comprehensive survey to determine the aircraft industry's needs for heavy forgings and extrusions in both steel and light alloys. Drawings and data accumulated were evaluated at Dayton by experienced industry forging specialists. These evaluations supported the large presses for production usage but rejected the 75,000-ton forging press and the 25,000-ton extrusion press for experimental development purposes.

ARNOLD ENGINEERING DEVELOPMENT CENTER (AEDC). The development test facilities at Tullahoma, including the engine-test facility, the supersonic propulsion tunnel and the gas-dynamics tunnel, are nearing completion. Air Force and ARO are now working out procedures for Industry's use of these facilities.

One of the first problems in need of attention is Air Force re-evaluations of the industry's recommendation that the AEDC facilities be operated on a fee, rather than non-fee, basis. Some advantages for the fee system are considered to be the following:

More efficient operation of test facility,
Scheduling facilitated,
Compatibility of tests and facilities,
Manufacturers' control of test programs,
Commercial laboratories not jeopardized.

Although action taken by Congress contemplates the cut-off of funds to ARO after March 1953, the industry has previously recommended and continues to recommend that AEDC be operated by a private contract organization. Industry is firmly opposed to Government operation of these facilities, either on a military or civil service basis.

The AIA has also recommended to the Air Force that the proposed expansion of AEDC to include an engine-components test facility and a structural test laboratory not be approved, since such facilities are essential in the manufacturers' own plants for proper development of advanced designs.

FACTORS INFLUENCING COST OF AIRCRAFT. Following a request from the Commanding General, AMC, the AIA's technical committees were directed to study and determine in what respects the Air Force itself could modify its specifications and procedures to reduce the cost of aeronautical equipment.

Undertaking a major effort, all committees participated in developing comprehensive recommendations covering:

- Product performance and test requirements,
- Administrative procedures and regulations affecting engineering,
- Contractor furnished data,
- Materials and process requirements,
- Standardization of parts,
- Quality control and inspection,
- Reduced engine acceptance testing.

More intensive industry effort is also being devoted to materials and component standardization to reduce initial costs, as well as those for maintenance and field stocking. Typical results of this effort were presented in a pamphlet entitled "Mr. Taxpayer Gets a Break," that describes the engine industry's progress on bolt standardization which saved a million dollars.

GUIDED MISSILE PROGRAM. The across-the-board procurement of guided missiles by Air Force, Bureau of Aeronautics, Army Ordnance and Navy Ordnance has posed an increasing number of complex problems for the industry. Divergent requirements on drawing practices, manufacturing parts numbering, inspection systems and component part standardization have resulted in duplication of engineering effort.

Based on AIA recommendations, the Munitions Board has initiated projects to develop common requirements and procedures on guided missile procurement which all Services can observe. Initial progress can be reported on a MIL Specification on Design and Construction Requirements for Guided Missiles. This specification is currently being coordinated with industry.

It is apparent that the guided missile activity will soon become a significant part of the work of the Association's technical committee, requiring integration with other existing fields of interest, such as the electronic equipment and rocket propulsion programs.

MATERIALS CONSERVATION. The industry's conservation efforts have been primarily related to the following:

Engine manufacturers redesign of jet engines to reduce the amounts of cobalt, nickel, columbium, tungsten and molybdenum to meet target values developed jointly by industry and the Munitions Board.

Airframe manufacturers' voluntary exchange of information on in-plant conservation measures, such as reclamation of industrial diamonds, floored hardware sweepings, and grinding sludge, as well as exchange of educational films for plant personnel.

All industry segments' participation in a cooperative boron steels series testing program to determine their suitability to replace high-nickel-content steel alloys.

MILITARY AND INDUSTRIAL STANDARDIZATION. Because of its ultimate great importance to the cost of aeronautical military equipment and to the effective utilization of the industry's standardization efforts, a statement in last year's AIA Annual Report is reiterated:

"The industry's standardization activities with respect to component parts, materials and process specifications

have been largely integrated with corresponding activities of the Air Force and the Bureau of Aeronautics. In the Government's unification program, however, there has been a gradual absorption of AN aeronautical standards and specifications into the much broader military (MIL) series where the preponderance of interest is non-aeronautical.

"The time delays associated with coordination among numerous military departments and the resultant compromises that are necessary to reach agreement on such a broad coverage have altered the position of the Aircraft Industry and have reduced the effectiveness of its efforts. Aeronautical quality is no longer the prime factor in the MIL standards and specifications and it is becoming increasingly necessary for industry to request deviations from the MIL series to meet its needs. It is thus apparent that we have substituted a system of 'deviations from general specifications' for the previous system of military aeronautical series specifications. It is felt that the Air Force and the Navy Bureau of Aeronautics should reassess the role of the Aircraft Industry in the present military (MIL) standardization program to determine whether greater benefits might result from the same efforts concentrated on industrial standardization in the aeronautical field."

The AIA cannot too strongly emphasize the importance of the early resolution of this very serious problem.

Aircraft Technical Committee (ATC)

The ATC has devoted its primary attention to general problems of the industry concerning research and development facilities, Congressional testimony on prototype legislation and Air Force-Navy engineering design change procedures, as well as surveillance of the programs of the several ATC subcommittees. The committee also served to determine the nature and extent of aircraft industry support to be given to other technical organizations such as the Society of Automotive Engineers, Radio Technical Commission for Aeronautics, American Standards Association and Society of Aeronautical Weight Engineers.

COST REDUCTION PROGRAM. Participating in the general AIA study of factors tending to increase the cost of military aeronautical equipment, the ATC undertook an evaluation of Air Force and Navy specifications and standards, airplane general design and construction requirements, mock-up and type boards, contractor furnished data, structural and flight test requirements, equipment approval and Services procurement procedures.

USAF RESEARCH AND DEVELOPMENT PLANNING. The committee assisted in developing industry comment on the report prepared for the Air Force by the Stanford Research Institute on long-range research and development planning.

AIRPLANE MODEL SPECIFICATION. Continuous industry efforts since 1943 have failed to achieve Air Force-Navy agreement on a standard format and instructions for the preparation of airplane model specifications. The problem has now been referred to the Department of Defense Cataloging and Standardization Agency.

ENGINEERING CHANGES IN DESIGN. AN Bulletin 390 received major attention from both industry and the Services and mutual agreement has now been reached on procedures for processing engineering design changes with a minimum of delay.

NSIA AIR CARGO ACTIVITY. Through the ATC, industry has participated in the NSIA Air Cargo Task Committee program involving plane cargo space, ground transportation, packaging and materials handling, terminal facilities and commercial cargo.

PRESIDENT'S AIRPORT COMMISSION INVESTIGATION. Comment and recommendations were developed by ATC members on the relationship to and effect of transport aircraft design and operating characteristics upon airport size, location and traffic control problems. The final Doolittle Commission report took cognizance of recommendations submitted by AIA in behalf of the transport manufacturers.

Airworthiness Requirements Committee (ARC)

The separate areas of industry interest—namely, transport, personal aircraft and helicopters—have been pursued by the corresponding ARC divisions as follows:

ARC TRANSPORT COMMITTEE

Participated in the extensive CAB Annual Airworthiness Review to amend the T-Category requirements in CAR 4b.

Revised and reissued the ARC Design Manual for Aircraft Electrical Installations which has received recognition in all parts of the world, as well as the U. S., as the outstanding authoritative document on this subject. Developed and issued a comprehensive technical report on ground loads and design criteria for unconventional type landing gear.

Recommended that the CAA and CAB establish a policy of according primary attention to U. S. domestic airworthiness rules, with secondary effort on ICAO international standards.

Urged the CAA and CAB to proceed slowly in developing new requirements for jet transport civil type certification, pending accumulation of experience in the designing, testing and operation of jets.

ARC PERSONAL AIRCRAFT COMMITTEE.

Achieved improvement of Part 3 airworthiness rules, including elimination of troublesome flight manuals previously required for aircraft under 6000 pounds.

Allieviated several controversial problems associated with the CAA-delegated option for manufacturers' self-certification of light aircraft.

Urged CAA and CAB recognition of principal for both domestic and international application of operational category system, providing maximum flexibility of aircraft utility without necessitating type certification against several sets of design rules.

ARC HELICOPTER COMMITTEE.

Successfully opposed CAA efforts at CAB Annual Airworthiness Review to establish new rule that all scheduled passenger helicopters must be multi-engine.

Informed the CAA and CAB that unless costs and time delays for CAA type certification of helicopters are reduced, the practice of providing civil approval of heli-

copters under military procurement might be jeopardized.

Succeeded in obtaining Air Force, Navy and Army endorsement of a standardization program for joint military design requirements for helicopters. Industry review and comment was completed on the MIL Helicopter Flying Qualities Specification and the second of the series, that on structural criteria, is being coordinated with industry.

Aircraft Research and Testing Committee (ARTC)

The activities of the ARTC during the past year reflected the need for solution of problems associated with the design of aircraft for operation at higher speeds and altitudes under the attendant conditions of higher temperatures, higher loads and reduced space for systems and installations.

The committee's primary attention was given to materials for airframe construction, with titanium and titanium alloys receiving emphasis. The committee: (1) participated in titanium conferences sponsored by the Minerals and Metals Advisory Board of the Defense Department's Research and Development Board, (2) conducted for the Air Force an industry survey of current airframe usage requirements to supplement a four-year forecast made the previous year, (3) established two projects—one to develop requirements for spot and fusion welding, the other to develop requirements for the type of alloys currently needed.

Other materials receiving emphasis included transparent plastics and glass for windows and canopies and structural plastics, including sandwiches and adhesives. The committee participated in an Air Force-AIA sponsored annual conference on research developments and requirements for transparent materials and continued its own cooperative testing and evaluation program. A project to compile available elevated temperature data on laminates was established and two reports were published in the AIA Technical Series: "Electrical Test Procedures for Radomes and Radome Materials," and "Test Methods and Acceptance Standards for Aluminum Honeycomb Material."

The committee was concerned with certain aspects of the Air Force Heavy Press Program. It was instrumental in bringing about conferences with the Military, the press builders and the operators,

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aimed at establishing mutual understanding of requirements and limitations in the design and production of large forgings and extrusions for simplified production of integral components of basic airframe structure.

Regularly scheduled meetings were held at the members' plants, at the NACA Lewis Flight Propulsion Laboratory, and at the Air Force Missile Test Center at Patrick Air Force Base. The annual meeting with the Air Force and Navy was held in Dayton.

National Aircraft Standards Committee (NASC)

NASC is continuing its standardization activities on behalf of airplane and helicopter manufacturers. The past year has seen a growth in the committee, with five more companies represented. The heavy work load of projects and review of standards and specifications has made it necessary to streamline operating procedures and limit new programs to those most common and urgent to the industry. More than 20 NASC projects were completed during the year and 18 new ones established.

The increasing importance of standardization in the helicopter field has been recognized by the establishment of an NASC subcommittee, which will concern itself with problems of special interest to helicopter manufacturers.

The airframe industry's official voice in the Military Services' standardization program has been achieved through the Council for Military Aircraft Standards, on which the NASC is represented by its committee officers.

Typical of projects completed during the past year by NASC are: involute serrations and spline standards to simplify tooling, universal head monel rivets, control cable take-up links, pressure fueling connections, and locking device for hydraulic cylinder rod ends.

New projects established included: development of flexible hose couplings standards to meet the needs of line coupling designs with increasing use of engine bleed air, panel fastener standardization for higher strength requirements of new high speed aircraft designs, switches capable of reliable performance under all environmental conditions, 12-point external wrenching bolt, bearing load ratings and rivet symbol standardization.

Other activities engaged in during the year included presentation of generator characteristics, clarification of equipment approval poli-

cies, cooperative efforts with the steel industry on Government material specification for more realistic requirements and revision of the Metals Warehouse Stock List.

Accessory and Equipment Technical Committee (AETC)

This committee has been increasingly active in cooperating with the other AIA committees, SAE committees and military and civil Government organizations in establishing new or revised requirements on the following:

- ... Alternate steels and reduction of usage of critical materials.
- ... Standardization of equipment environmental test requirements.
- ... Standardization of degree filtration; test set-up; test procedure and evaluation of test results for ground fuel filters.
- ... Spline wear as being determined by joint ETC-AETC test program.
- ... Surveillance of methods, procedures and policies of acceptance or approval by the Military Services and the CAA of aircraft accessory and equipment components.
- ... Review and comment on new and revised Government specifications, directives and orders involving equipment items and their installation in aircraft systems.
- ... Standardization of calibrating fluid for fuel metering equipment.
- ... Cooperation with ETC on jet engine control studies.
- ... Cooperation with NASC on Council for Military Aircraft Standards project for standardization of UN screw threads for numbered sizes.
- ... Cooperated with other AIA committees in cost reduction study.
- ... Recommended Qualified Products Lists accompany all specifications requiring qualification approval.
- ... Cooperation with petroleum companies and Government agencies in developing vapor liquid ratio test equipment.
- ... Recommended liberalization of policy regarding use of industry and company specifications.
- ... Cooperated with ETC on engine accessory design problems.

Electrical and Electronic Committee (EEC)

This committee was established jointly in 1951 by the AETC and the ATC, and has been increasingly active in cooperation with other AIA committees and numerous Government agencies and industry organizations. Specifically the EEC completed action on:

- ... Recommending new or revised requirements for Government specifications such as electron tubes, radio noise filters, radio noise interference and test requirements, general requirements for electronic equipment, aircraft electric power, inspection of tubes and electric motors.
- ... Establishing industry requirements and development of industry specifications for miniature, high temperature, reliable components such as hook-up wire, capacitors, resistors, potentiometers and radio noise filters.
- ... Development and presentation of data on environmental requirements encountered by airborne electronic equipment.
- ... Exchange of information with Research & Development Board on areas of research needed for electronic equipment development.
- ... Collection and dissemination of information on electronic equipment, design and development programs.

Engine Technical Committee (ETC)

The ETC activities for the past year have been directed toward the reduction of cost through simplification of engineering requirements in Military specifications and standards and through conservation of critical materials. The committee has continued its principal activity in dealing with policy problems related to Military and Government regulations and in guiding the efforts of associated professional societies and committees dealing with powerplant standardization matters. Specifically, the committee this year took action on:

- ... Cooperative studies with bearing manufacturers on critical high-speed jet engine bearings.
- ... Conservation policies of DPA and Munitions Board.
- ... Reduction of acceptance testing time for turbo-jet engines.
- ... Benefits derived from cooperative engine standards program—"Mr. Taxpayer Gets a Break."
- ... New endurance test requirements for civil type reciprocating engines.

Through its various specialist subcommittees, the ETC has also been active in establishing new or revised requirements in the following fields:

- ... Fluid connection for fuel and oil lines.
- ... Engine accessory drives and pads.
- ... Quick starting for jet engines.

- ... New jet engine fuels.
- ... Propeller attachments for advanced power plants.
- ... Jet engine controls.
- ... Vibration frequency response meters.
- ... High temperature lubricants for jet engines.
- ... Test and sampling procedures for acceptance of jet engines.
- ... Preferred material gage sizes.

Inspection Committee (IC)

The Inspection Committee continued its close cooperation with Military quality control personnel through frequent conferences and the presentation of recommendations directed toward reducing the cost of overall inspection and streamlining the procedures in administration of Air Force and Navy policies. The committee expanded its operations to include meetings with Munitions Board and Department of Defense groups particularly with the view toward obtaining unified inspection requirements, reciprocal inspection agreements, and consideration of quality control for research and development contracts. Among the principal projects which the committee completed during the past year were:

- ... Recommendations to the Munitions Board for standardization of aircraft delivery forms.
- ... Coordination with Air Force on Specification MIL-Q-5923 Revision "B", General Air Force Inspection Requirements.
- ... Recommended policy on source inspection.
- ... Proposed standard for Rockwell Hardness Charts for receiving inspection.
- ... Development of specification on classification and inspection of castings.
- ... Recommendations to the Military on requirements for optical inspection of transparent plastic areas.
- ... Policy on Air Force maintenance inspection requirements.
- ... Policy on use of Government versus industry process specifications.
- ... Completion of first phase of program to evaluate variable sampling methods.
- ... Presentation of recommendations for research and development quality control to the Department of Defense.

Manufacturing Methods Committee (MMC)

The MMC continued its program on industrial preparedness through exchange of information among members, through cooperation with the Military Services, and through working with the manufacturing equipment industries.

The Panel on Conservation continued its efforts on critical materials conservation, scrap reduction and recovery and plant educational programs on preventive conservation measures. Industry recommendations were submitted relative to the Air Force policies on conservation in general and on floored hardware. The Panel on Tooling conducted an industry survey on plastic tooling requirements for submittal and discussion with plastics producers, and industry viewpoints were developed on the Air Force proposed project on Kirksite die substitute materials. A survey was initiated to obtain information for DPA and the Military Services concerning the MMC members' plant conservation organizations and programs.

The Air Force heavy press program continued as a subject of foremost interest. The committee participated in conferences with the Military Services, the forging press builders and the operators, aimed at establishing a mutual understanding of industry requirements. An industry position was developed on allocation and responsibility for machine tool support of the forging presses.

Within the scope of the policy established by the Board of Governors, the committee considered proposed Air Force manufacturing methods projects, and in cooperation with the Air Force established a system for receiving current progress reports on Air Force contract projects to supplement the already existing quarterly status reports.

Noise Control Committee (NCC)

Committee activity continued to center on an exchange of information concerning problems associated largely with the design, construction and utilization of suppression devices for ground operation of jet, rocket and supersonic propeller-powered aircraft and engines. Emphasis was given to research needs and some attention will be focused in the future on physiological effects of noise.

Research items currently in process of industry endorsement prior to submittal to the Government organizations concerned are: (1) an evaluation of existing noise control installations; (2) development of acoustical scale-model study technique for aircraft engine silencing

structures; (3) evaluation and development of new acoustic materials; (4) determination of the nature of noise generation and methods of alleviation at source; and (5) determination of the attenuation effect of water. An additional item concerning new measuring equipment is also currently in process of development.

The AIA's Noise Control Committee has also taken cognizance of the activities of other more recently established committees in this field, such as the National Aviation Noise Reduction Committee sponsored by the CAA and the NACA's Special Subcommittee on Aircraft Noise. The report of the President's Airport Commission, "The Airport and Its Neighbors," was distributed to committee members for consideration and guidance where noise problems were involved.

Standards on noise measurement, under joint development for several years by the committee and the Aircraft Research and Testing Committee, were published under date of August 1. Demands for additional copies already point to the need for a second printing.

Propeller Technical Committee (PTC)

The PTC has continued its close cooperation with engine manufacturers on policy items related to military and civil government regulations on design and procurement problems in the following fields:

- ... New standards for propeller attachments for large turbo-prop power plants.
- ... Propeller airworthiness regulations.
- ... Propeller torque surge design factor.
- ... Preferred material gage sizes for engine and propeller usage.
- ... Approval procedures for changes in design.
- ... Implementation of AN aeronautical screw threads.

Through its specialist subcommittees, the PTC has continued its cooperation with other industry and Government groups in establishing recommendations on the following items:

- ... Standardized methods of propeller performance analysis.
- ... Standards for propeller flanges and gaskets, including accessory and propeller governor design detail.
- ... Alternate steel program for use of boron series.
- ... Revision of propeller shaft and standards.
- ... Test requirements for transonic and supersonic propellers.
- ... Availability of engines for development testing.
- ... Propeller radio noise interference requirements.

Rocket Technical Committee (RTC)

During this second year of operations of the Rocket Technical Committee, additional recommendations for standardization of performance and test requirements were submitted to the Military Services. The committee continued its practice of visiting various industrial plant and Government test facilities in conjunction with its regular meetings. Provisions were made for completing work on general design requirements for liquid propellant rocket engines in cooperation with the Military Services. Specifically, the RTC completed action on:

- ... Publication of a Handbook on Rocket Engine Design and Installation Criteria.
- ... Presentation of recommendations for propellant tank specifications.
- ... Establishment of accessory components evaluation program.
- ... Recommendations on flight approval test requirements.
- ... Recommendations on fuel and oxidizer specifications.
- ... Cooperation with the American Standards Association and the American Rocket Society in the development of standards for rocket definitions and symbols.
- ... Review of rocket engine industry standardization policies.

TRAFFIC SERVICE

In September of 1951 the Traffic Director appeared before the railroads' three Classification Committees and presented arguments why they should reject proposals for substantial increases in less-than-carload classification ratings covering a wide variety of airplane parts. Advice recently received discloses that the committees, acting on our showing, have withdrawn these proposals.

The complaint attacking carload classification ratings on airplane parts, filed with the Interstate Commerce Commission, was heard by the Commission on January 15 and 16, 1952. Briefs were filed and, following an adverse examiner's report, exceptions were taken. This case was argued on October 9, and the Commission announced it would hold up decision until the Government reparations cases had been decided. AIA has petitioned that decisions not be delayed.

On September 17, 1951, the ICC heard an application filed by the railroads for permission to publish tariffs which would limit their

liability for damage in transit to engines used in aircraft, unless shippers were willing to pay rates substantially higher than those now in effect. The Traffic Service intervened and three witnesses from engine manufacturers submitted substantial evidence in opposition. A favorable examiner's report was submitted, which proposed that the Commission decline the carriers' application. Exceptions were filed by the railroads and the case was argued October 9. Decision has not yet been rendered.

Members of the AIA have been convinced that railroads moving freight between points east of the Rocky Mountains and the Pacific Coast, by rules published in their tariffs, have unduly restricted the shipment of freight in mixed carloads. Under these rules, liberal mixtures are permitted only under extortionate rates. Because the interest in this matter was so widespread, it was felt that the AIA should not assume the entire burden of a complaint case against these rules. Hence, when a large group of shippers on the Pacific Coast filed such a complaint with the ICC, the Traffic Service intervened and, through four member witnesses, presented testimony at a hearing in San Francisco, October 13. ICC has asked for briefs by December 15. If success finally attends these efforts, substantial savings in transportation charges will result.

Much trouble in the past has arisen to plague prime contractors through the issuance of directives requiring the use of Government bills of lading in movement of Government-owned material from vendors or subcontractors to prime contractors operating under CPFF contracts. It was difficult to impress upon the thousands of small vendors the need for and manner of using Government bills of lading. Frequently also, the Government agency would refuse applications for such ladings. Delays thus encountered in the movement of vitally needed shipments were such as to interfere seriously with the production program. To meet this situation, resort was had to the use of commercial bills of lading, with instructions to convert to Government bills of lading at destination. The accumulation of documents in Air Force offices awaiting conversion resulted in such delays in the payment of freight charges that the railroads protested vigorously and in the spring of the year, Wright-Patterson Air Force Base issued directives ordering the use of GBL's exclusively in the movement of these materials. This caused such consternation among the prime contractors that the AIA requested an opportunity to present to the Air

Force the facts which made the annulment of these directives necessary. The hearing was held May 27. This conference resulted in a postponement of these directives in order to provide time for the necessary investigation and the prescription of appropriate remedial orders. From the latest information received, it now appears that the problem is well on its way to solution.

Four regular meetings and one joint meeting of our two Regional Traffic Committees were convened for the discussion and the disposition of traffic problems of concern to our industry.

EXPORT SERVICE

Mutual Defense Assistance Program

The Export Committee has given much time and attention to following Public Law 213 of the 82d Congress. It established a new basis for cooperation with the NATO countries to enable the United States to provide increased military and economic assistance. This includes the furnishing of technical assistance and licensing the manufacture of patented products to permit the production of aircraft and parts of U.S. design in Europe. In general, the parts are being secured through so-called "off-shore procurement," handled primarily through the USAF headquarters in Weisbaden, Germany. The licensing agreements for the manufacture of complete U.S. type aircraft are between the licensee and licensor. In addition, it is contemplated that extensive purchases will be made of military aircraft of foreign design for distribution to and use by various NATO countries.

An activity being continued for the second year is an Industry Advisory Committee to the State and Commerce Departments (on which the AIA is represented) for drafting bilateral Government-to-Government agreements outlining appropriate procedures and guarantees covering cooperation. It is expected that British and possibly French signatures to the agreement will be forthcoming.

Further efforts for maintaining appropriate relationships and contacts included visits by members of the Export Committee to the USAF headquarters in Weisbaden, and to the Mutual Security Agency headquarters in Paris. In addition, letters expressing concern over the handling of this NATO assistance were addressed to the heads of our Government departments concerned.

Society of British Aircraft Constructors' Farnborough Exhibition

The Export Director of AIA attended the SBAC exhibition at Farnborough, England, in September and reported on some outstanding features of the exhibition.

Foreign Distribution of Aviation Publications

Arrangements continue for the sixth year which permit the aircraft industry to distribute, by Government pouch, literature covering all aircraft products, to agencies abroad of the U.S. Government, including embassies, legations, information libraries, air attaches, and branches of the CAA throughout the world.

Foreign Aviation Reporting

A basic function of the Export Service is that of distributing to AIA membership, current aviation information which is obtained from the U.S. embassies and legations throughout the world. This information is compiled overseas for the various agencies of the Government, but much of it is of value to the U.S. aircraft industry.

Export Licensing

Fortunately for the aircraft industry, the licensing of all aircraft and parts has been considered on the same basis as export of munitions, which required separate handling by the Department of State, rather than by Commerce, through which all other commodities are licensed. Prompt service thus resulted because of the more limited volume of licenses involved. The Export Service has frequently been able to assist AIA member companies in the handling of their export licensing problems.

Export-Import Bank and World Bank

The Export-Import Bank has continued to be a channel for assisting in the financing of foreign aircraft sales. Many contracts were closed which could not readily have been financed otherwise. During 1952, the International Bank of Reconstruction and Development (commonly called the "World Bank") has for the first time, financed a very substantial contract for the sale of American aircraft to the Netherlands.

Export Statistics

Distribution is made both monthly and annually of the Census Bureau information covering the export of aircraft and parts which

permits each company to compare its exports with the total shipped from the United States to each country and in each category. Further monthly confidential compilation is made on behalf of the manufacturers of utility aircraft.

Information is being distributed monthly covering the confirmed letters of credit opened in the United States by Latin American purchasers. This shows the position of each country as a guide to prospective business in each area. This information is charted quarterly to show the trend. Similar information is tabulated and charted quarterly for other countries of the world but only on a basis of their ability to purchase.

Reciprocal Trade Agreements

No results from international conferences on trade agreements have become available during the 1952 fiscal year, but such a conference was in session in Geneva at the close of the year. This situation has been followed by the Export Service since its organization.

Japan and Germany

The recent peace treaty signed with Japan, and the one anticipated with Germany, are opening two additional markets for the sale of aircraft and aircraft products which should be a substantial addition to the U.S. export business. Delegations from both Japan and Germany have been received by the Export Committee and arrangements made for their visits to the various American plants. A number of aircraft have already been sold and shipped to Japan.

Export Committee Meetings

Four general Export Committee meetings were held during the year, two of which were in New York and two in Washington.

UTILITY AIRPLANE COUNCIL

During the past year the Personal Aircraft Council changed its name to Utility Airplane Council. This change resulted from a general feeling that the word "utility" was more expressive of the activities of this branch of the industry.

The principal activity early in the year, had to do with the allocation of critical and controlled materials. Much assistance was rendered member companies, and the Council Manager acted in a liaison

capacity with Government agencies in presenting industry viewpoints on allocation programs. Top level Government, understanding the needs of general civil aviation, continues as an important objective.

The market for light aircraft for business, industry and agriculture, has continued to improve as allocated materials have permitted a gradual increase in production levels. It is also gratifying to report that there is a much better understanding of the defense-supporting nature of the civil aircraft manufacturing industry and the use of its product.

Production

Production, which had been at an annual rate of more than 4,000 at the start of the Korean war and had fallen to less than 2,000 by January of this year, has now increased and has reached an annual rate of 3,700.

The utility aircraft industry, both as prime and subcontractors, continues to devote a major portion of its facilities to the production of military aircraft and engines and to components of military aircraft. Substantial numbers of liaison-type aircraft have been delivered to the military services and are in service in Korea, Europe and other foreign theatres of operations, as well as in the United States.

Aircraft Utilization

The steady trend toward increasing business and agricultural use of light civil aircraft is borne out by CAA figures, based on recent statistical studies of actual utilization. Comparing 1951 to 1949, which was the last year of statistical record, increases in flying hours attributable to various forms of non-carrier (general) aircraft are as follows: Farming and ranching 12%; commercial crop dusting and spraying, 24%; transportation for hire (charter, air taxi, etc.), 13%; various business usages, 21%. While there was a drop in total hours flown in 1951, as compared to 1949 (11,000,000 as compared to 8,500,000), this drop can be traced to a fall-off in instructional flying and in flying for pleasure.

CAA statistics reported 54,039 civil aircraft January 1, 1952, and 60,921 a year earlier. No significance is attached to this shrinkage of the active fleet in the past year. There has been a considerable reduction in instruction flying, as the benefits of the G.I. Bill of Rights have been used up. This has idled a number of smaller trainer types. Attrition, which has been exceeding the rate of new production be-

cause of large numbers of light military aircraft disposed of as surplus after World War II, and which are impractical and uneconomical for present-day usages, also account for a substantial part of this shrinkage. Despite an increasing rate of new production, there will probably be further shrinkage in the total active fleet before it again begins to grow.

Advisory Role

The Council has participated in an advisory capacity to many agencies of the Government on normal and defense usage of light aircraft. A member of the Council serves as a member of the Aviation Development Advisory Committee to the Civil Aeronautics Administrator. The Council chairman and manager are members of the Civil Aviation Aid Defense Advisory Committee, a joint activity of U.S. Air Force/Air Defense Command and CAA; the Manager is a member of the Transportation Advisory Committee to the Federal Civil Defense Administrator. The Council frequently advised with the CAA, the Air Coordinating Committee, the Defense Production Administration, the National Production Authority, the Defense Air Transportation Administration, the Petroleum Administration for Defense, and the Department of Defense.

The Council's activities are closely coordinated with those of other interested national organizations. It is also a recognized source of information. Its members have participated in many inter-industry discussions on airports, and the views of the Council were brought both formally and informally, to the attention of the members of the President's Airport Commission. A statement on "The Role of Non-Carrier Aviation in Air Commerce" was submitted to that Commission. Following the official report of the President's Airport Commission, the Council also submitted a statement commenting on the recommendations and implications of this report as they related to the field of general aviation.

The Council manager has appeared as a spokesman before many meetings of national associations, Government groups, university seminars, and other audiences. He is currently chairman of the Conference of National Aviation Organizations, and is an officer of the National Aeronautic Association.

During the past year, the Council held three meetings.

Three-Point Program

With a steady improvement in the materials situation, and recognition of its defense-supporting role, increasing emphasis is being placed by the Council on a three-point program: (1) The increasing importance of the utility of light aircraft in the fields of business, industry, and agriculture; (2) emphasis on the importance of the smaller airports system, which has been highlighted so far this year by the Council's comments on the report of the President's Airport Commission; (3) continuing work on the justification of material allotments, and general vigilance so that any emergency plan that may be devised will not impose unrealistic restrictions on the field of general civil aviation.

In connection with the airport program, the Council is currently re-appraising its position with respect to the National Airport Plan with a view toward developing a program that will encourage communities to construct and to maintain smaller airports.

The Council maintains highly satisfactory relations with the press, the various agencies of the Government, and with the civil aviation fraternity at large.

HELICOPTER COUNCIL

Council Objectives

The following objectives have been established during the year by the Helicopter Council:

1. To support the continuing use and, where logical, the increased procurement of helicopters by the Military Services.
2. To develop practical interest in the commercial future of the helicopter, and at the same time attempt to restrain unwarranted predictions of public acceptance of the helicopter as a means of individual transport.
3. To point-up the urgency of revising existing laws and regulations which as now written, would effectively prohibit the full utilization of the helicopter in certain areas.
4. To provide informational material to all Governmental agencies, military and civil; to the press, radio and television and to other interested agencies and organizations and individuals.

Council Activities

HELICOPTER SOCIETY FORUM. The Helicopter Council cooperated with the American Helicopter Society in arranging its annual forum. These sessions were attended by leaders of the Armed Forces and Secretary of the Army Frank Pace was the banquet speaker. This was the largest, and considered to be the most successful, forum in the Society's history. The plans of the Council to work with the Armed Services in arranging a public helicopter demonstration similar to that provided in 1951, were cancelled because of the gasoline shortage at that time.

PRESIDENT'S AIRPORT COMMISSION. When the Newark Airport closing focused national attention on the need for better planning of airport facilities, the Helicopter Council was called upon by the President's Airport Commission to prepare a thorough survey and resumé on "The Status of the Helicopter in Relation to the Future Development of Air Transportation and Airport Planning." The Council prepared this report with all member companies participating, in addition to recognized experts in civil Government and in the field of operations. This report resulted in the helicopter receiving favorable attention in the findings of the Commission, headed by Lieut.-Gen. James H. Doolittle.

AIR NAVIGATION DEVELOPMENT BOARD. The Council is providing the Air Navigation Development Board with background material for use in its study of the future navigational needs of helicopters in commercial operations.

HELIPORT PLANNING. Recognizing the great importance of proper planning in the location, design and construction of heliports, the Council has formed a special Heliport Committee to formulate industry opinions on these problems and to work with official agencies concerned with this type of planning. It is hoped that in this operation the industry will establish a position wherein it will have a definite voice in final regulatory decisions.

RECOMMENDATIONS TO NACA. Appreciating the need for increased research activity, the Council acted on the preparation of specific recommendations to the National Advisory Committee for Aeronautics. The engineering suggestions made by individual members are to be unified in one comprehensive statement and submitted to the National Advisory Committee for Aeronautics.

HELICOPTER OPEN FORUM. A significant forward step insofar as commercial utilization is concerned was taken when the Baltimore Association of Commerce decided to arrange an open forum discussion and flight demonstration stressing the utility of the helicopter. Believing this to be potentially a model for similar meetings in other cities, the Helicopter Council worked closely with the Association in bringing together a panel of experts to discuss various phases of helicopter operation with more than two hundred leaders of all types of business gathered for the occasion. Guest flights in a transport helicopter were provided. An immediate result of this operation is the reported intention of Baltimore City officials to proceed with the selection of a site for Baltimore's first municipal heliport.

COMMERCIAL DEVELOPMENT. At the request of the Corporation Aircraft Owners Association, the Council Chairman participated in the Association's annual convention and spoke in detail on the place of the helicopter in business and executive flying.

COOPERATION WITH STATES. Realizing the obstacles confronting the inauguration of helicopter services in many of our major cities, the Council participated in the annual convention of the National Association of State Aviation Officials. The Council will continue to work in cooperation with the NASAO in eliminating or revising regulations now existing which would effectively bar the full utilization of the helicopter in certain areas.

SERVICING THE PRESS. The interest of press, radio and television, whetted by spectacular flights, such as the first trans-Atlantic crossing by helicopters and the establishment of a new world distance record, resulted in a greatly increased call upon the Council for statistics and background material on the helicopter. The increasing realization by airlines of the potential of the helicopter in their operations has created a new demand for such data. The Council has accumulated for distribution, much informational material touching on all phases of the helicopter and its use.

REVISION OF PROGRAM. The Council program was reviewed and revised at the two regular meetings called by the Chairman, and staff memoranda keep the membership, now numbering nine companies, fully informed of developments.

COUNCIL-SPONSORED RECEPTIONS. During the year the Council served as host at two major receptions, one preceding the Honors' Night Banquet of the American Helicopter Society, and the other in honor of Lord Douglas of Kirtleside, Board Chairman of the British European Airways, following his tour of helicopter plants. The Council also cooperated with the Aviation Writers' Association, the Institute of the Aeronautical Sciences and the American Helicopter Society in organizing a series of programs featuring the helicopter.

The final meeting for calendar 1952 will be held December 17 in Washington, D. C., at which the program for the coming year will be formulated to meet the needs foreseeable at that time.

