Report

TO

THE PRESIDENT

BY THE

EMERGENCY BOARD

APPOINTED BY EXECUTIVE ORDER 10750 DATED JANUARY 28, 1958, PURSUANT TO SECTION 10 OF THE RAILWAY LABOR ACT, AS AMENDED

To Investigate an unadjusted dispute between Eastern Air Lines, Inc., a carrier, and certain of its employees represented by the Air Lines Pilots Association, International, a labor organization.

NMB CASE E-146

WASHINGTON, D. C.
JULY 21, 1958

(No. 121)

LETTER OF TRANSMITTAL

WASHINGTON, D. C., *July 21, 1958*

THE PRESIDENT,
The White House.

Mr. PRESIDENT: The Emergency Board created by you on January 28, 1958, by Executive Order 10750, pursuant to section 10 of the Railway Labor Act, as amended, to investigate an unadjusted dispute between Eastern Air Lines, Inc., and certain of its employees represented by the Air Line Pilots Association, International, a labor organization, has the honor to submit herewith its report and recommendations based upon its investigation of the issues in dispute.

Respectfully submitted.

DAVID L. COLE, *Chairman.*
SAUL WALLEN, *Member.*
DUDLEY E. WHITING, *Member.*

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I. HISTORY OF THE EMERGENCY BOARD

Emergency Board No. 121 was created on January 28, 1958, pursuant to the provisions of section 10 of the Railway Labor Act as amended, by Executive Order of the President. Thereafter the President appointed as members of the Board David L. Cole of Paterson, N. J., Chairman, Saul Wallen of Boston, and Dudley E. Whiting of Detroit.

The Board convened in New York on February 11, 1958 and held hearings on 26 days between that date and June 2, 1958, in New York City and Washington, D. C. The company was represented by W. Glen Harlan and William G. Bell, counsel, and George A. Smith, vice president. The association was represented by Henry Weiss, counsel. The President approved five 30-day extensions of the time stated in the Executive order for the Board to report, the last extension being until July 27, 1958.

At the conclusion of the hearings the Board met with the parties jointly and separately in Washington, D. C., in an effort to bring about a settlement of the dispute by mutual agreement. These efforts were not completely successful.

BACKGROUND OF THE DISPUTE

The parties to this dispute are Eastern Air Lines, Inc., and the pilots in its employ, represented by the Air Line Pilots Association, International. The last agreement between these parties was executed May 24, 1956, effective from June 1, 1956, until June 1, 1957, and renewing itself without change until each succeeding June 1, unless written notice of intended change was served at least 60 days prior to June 1 in any year.

On March 27, 1957 the Association served notice of intended changes upon the company, and on March 29 the company notified the association of intent to propose changes. Negotiations thereon commenced on May 14, 1957, and continued from time to time until November 18, 1957. On January 8, 1958, the association advised the National Mediation Board that the pilots would withdraw from service on January 11. That Board requested postponement and the association acceded to such request. Mediation sessions were conducted from January 18 to 23, 1958, without success, and the National Mediation Board closed its files on January 24. As noted above, this Board was created on January 28.

Eastern Air Lines is certified and authorized by the Civil Aeronautics Board to operate air routes in the eastern half of the United States, to San Juan, P. R., Bermuda, and Mexico City. As of February 1, 1958, its fleet consisted of 192 aircraft, of which 17 were leased and three operated under interchange agreements. As of December 31, 1957, it employed 746 first pilots and 964 copilots.

The company has ordered turboprop and turbojet aircraft. It has contracted to purchase 40 Lockheed Electra turboprop airplanes, delivery of which is expected beginning in September 1958, and has an option to purchase 30 more. This is an intermediate range aircraft which will fly at altitudes of approximately 25,000 feet and at speeds of approximately 375 miles per hour.

The Air Lines Pilots Association, International, is the recognized representative of the first pilots and copilots employed by the company for collective bargaining pursuant to the provisions of the Railway Labor Act, as amended.

II. RELATIONSHIP OF THE FLIGHT ENGINEER AND PILOT DISPUTES

Emergency Board No. 120 was created by the President on January 21, 1958, to investigate and report on the labor dispute between Eastern Air Lines, Inc., and its employees represented by the Flight Engineers International Association. A week later Emergency Board No. 121 was created with reference to the dispute between this carrier and its employees represented by the Air Line Pilots Association. These two boards were appointed pursuant to section 10 of the Railway Labor Act, which means that the dispute had not responded to the mediation processes of the National Mediation Board and that the National Mediation Board had notified the President that in its judgment each of these disputes threatened "substantially to interrupt interstate commerce to a degree such as to deprive a section of the country of essential transportation service."

The same three individuals were appointed as the members of each board, for the reason that in the judgment of the President, based on the advice of the National Mediation Board, the two disputes are closely interrelated. It became apparent immediately that these disputes could not be approached independently of one another. While among the items in dispute in each case are the wages and working conditions to apply to existing piston-powered airplane, as well as to the turboprop and turbine jet equipment, which will shortly come into use on this airline, the underlying issue which has prevented the parties in each instance from making any material progress toward settlement is that relating to

the flight crew complement. Both labor organizations insist on requiring higher qualifications for the flight engineer than those stipulated by the Civil Aeronautics Board. The FEIA urges that in addition to the flight engineer's certificate certain other requirements be imposed which could be met only by a highly qualified mechanic. ALPA, on the other hand, requests that the third crew member, in addition to having the present flight engineer's certificate, be a pilot-qualified individual. This the FEIA regards as an effort on ALPA's part to remove the present mechanic-type flight engineers from their jobs and to replace them with pilot engineers.

This disagreement has obviously been the obstacle which has retarded settlement discussions. Each organization has put the carrier on notice that its members will not operate the airlines, or at least not the turbine-powered equipment shortly to be received, unless its position is recognized. In the negotiations and mediation prior to the appointment of these two emergency boards, contrary to custom, little constructive attention was paid to the various pay and working conditions items.

For almost 20 years the pilots and the carrier had invariably worked out their differences through discussion, without resorting even to mediation, but in this instance it has been necessary to employ all the techniques provided by law, and the dispute is still very much alive. The relationship between the carrier and FEIA is briefer, and mediation, strike and strike threats have been experienced, but in the past the parties had come to grips with the problems with which they were confronted. In this case this was prevented by the overriding influence of the crew complement question.

There is another reason why the considerations affecting these two cases cannot be separated. Each group of employees has made different requests concerning pay and a variety of other working conditions and benefits. They all work in the same cockpit under identical conditions and on similar schedules. Their complex pay formulas are the same and their safety and well-being are closely linked. The crew complement dispute has aroused a great deal of friction and antagonism between the two organizations and each is inclined to bargain with the employer with a careful eye on what the other is doing or is apt to achieve. This strong element of rivalry is something which must be reckoned with realistically. If the special wishes of either are indulged this is likely to lead to a greater degree of dissension than now exists, and this should be carefully avoided if at all possible.

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Considering the background and the factors which must determine the nature of the respective collective bargaining agreements between each of these labor organizations and this carrier, these two labor disputes are inseparable particularly in light of the common crew complement issue.

We are under instructions from the President to recommend, after investigation, a basis for settling each of these disputes. It is our judgment that we can effectively do so only if we bear in mind that the crew complement dispute is primarily between the two groups of employees or their respective labor organizations, and, furthermore, that if an intolerable condition is to be avoided on this airline there must be a very close relationship between the terms upon which all other issues are settled.

It was proposed at the outset of these proceedings that the two cases be consolidated and heard as one. The carrier and ALPA favored this, but FEIA rejected the suggestion. Nevertheless, each of the employee groups sat in on the hearings in the other's case, and the FEIA, in presenting its rebuttal after the intervening pilot case was heard, directed most of its efforts at that point to contradicting or disputing points and evidence offered on behalf of the pilots. This simply bore out our view that as a practical matter the two cases are inseparable.

III. THE CREW COMPLEMENT ISSUE

PROCEDURAL OBJECTIONS RAISED BY THE FEIA

Two procedural or legal objections were raised by FEIA in connection with ALPA's position on the crew complement issue. The first is that FEIA has been duly designated and certified by the National Mediation Board to represent the craft or class of flight engineers on Eastern Air Lines, and that, pursuant to sec. 2 "Ninth" of the Railway Labor Act, it is the duty of this carrier to treat only with the FEIA as the certified representative of the craft or class for the purpose of the act. The second is that matters of the qualifications of employees, insofar as they bear on safety, are reserved by law to the Civil Aeronautics Board, and that emergency boards must recognize that such matters are outside their jurisdiction.

In deciding, despite these objections, to go into a complete investigation of the facts pertaining to the crew complement issue, and to make recommendations which we believe will serve as a reasonable basis for settlement, we are strongly influenced by the terms of our appointment by the President. He found that each of these disputes threatened substantially to interrupt essential

interstate commerce, and he therefore invoked the emergency board provisions of the law and issued to the boards the instructions indicated. We believe it is our duty to make a thorough investigation and to report and recommend, in keeping with these instructions, on any aspect of the parties' relationship which has prevented settlement of the pending labor dispute. We were convinced at the very threshold of these proceedings that if we failed to inquire into the essential facts and conditions which have led to this impasse we could not discharge our duty.

After all, we are not a forum in the nature of a court. We make no binding decisions or rulings. We may merely report and recommend. We do not have the right to change or replace the representative certified by the National Mediation Board and there are no illusions as to this. Nor do we have the right to supplant the Civil Aeronautics Board as the body which promulgates minimum standards for the safe and efficient operation of air carriers. The certification of the bargaining representative and the stipulation of the requirement that in certain circumstances there be a third flight crew member who must have certain minimum qualifications are facts which we accept as unalterable by us.

This, however, does not relieve us of the duty to ascertain why these labor disputes are still unresolved and to report to the President, as well as to the parties and the public, how we believe they should reasonably be settled. If the parties thereafter voluntarily choose to follow our recommendations, this is certainly their privilege.

The Certification of the FEIA by the National Mediation Board

Returning to the matter of the certification of the FEIA by the National Mediation Board, as we see the problem before us, the issue relates solely to the qualifications which the third crew member should have, and not to the labor organization which should represent him. Third crew members chose the FEIA as their bargaining agent and that organization is certified as the bargaining representative of the craft or class of flight engineers on Eastern Air Lines. That status is not in issue here. Sharply in issue, however, is the question whether in the turbojet and turboprop aircraft about to be placed into service by Eastern, the third crew member should be qualified solely as an engineer with a mechanical background or whether he should possess, in addition, training in skills and techniques of pilots so as to be able to assist in the performance of certain additional duties.

Flight engineers were not required before 1948. At that time the requirement was introduced largely through the efforts of the

pilots. When, on October 5, 1948, the Civil Aeronautics Board reaffirmed its regulation concerning the need for a third crew member it explained that it was doing so because of the increasing complexity of the pilots' duties, and that considerations of safety made it necessary to provide the pilots with assistance or relief. The CAB put it in these words:

> Despite the automatic devices which are available and installed in such aircraft, they have so many items calling for the pilot's attention and are so complex in operation that the pilot's ability to accomplish all duties imposed on them may at times be exceeded if provision is not made for a flight engineer. The flight engineer will contribute substantially to reduction of pilot fatigue and resultant accident-provoking sequences. In particular, the flight engineer can relieve the pilots of burdensome mechanical duties which if required to be performed when the aircraft is being flown on instruments, when there are difficult navigational problems, when radio communications are erratic, or when the pilots are attempting to follow complicated traffic control procedures, and accomplish instrument approaches, would be exceptionally onerous.

There can be no doubt that on domestic airlines the function of the flight engineer was intended to be that of an assistant to the pilot. The regulation was strongly opposed by the domestic air carriers as unnecessary, but the proponents, principally the pilots, prevailed. They prevailed on the basis of safety, for the proceedings leading to this new requirement followed closely a series of accidents on the new types of large 4-engine airplanes.

An air transportation carrier has the legal and moral obligation to conduct a safe and efficient operation. (See Civil Aeronautics Act of 1938, as amended, sec. 404 (a), 406 (b), and 601 (b).) It has been formally recognized by the FEIA that it is, therefore, within the area of management's discretion to determine what should be the qualifications of the flight crew members, subject to the minimum standards established by the Civil Aeronautics Board. This the representatives of the FEIA acknowledged in 1952 in the proceedings before Emergency Board No. 103, which investigated a dispute between that organization and United Air Lines, and that board made reference to this fact at pages 13 and 14 of its report. Since this is so, why should there be interposed a technical objection to discussions between the carrier and its pilots with regard to the qualifications of any part of the flight crew? The pilots are consulted on many operating and safety problems, and this certainly falls within that area. Even in the exercise of its discretion, a management is expected to be well informed and reasonable. In the airlines industry, management has frequently consulted with committees of its flight crew members on many matters normally in the province of management discretion, such

as the design of new aircraft, cockpit layouts, company procedures in operating aircraft, schedules and the like. To hold that it may not listen to the views of its pilots on the subject of the qualifications of all personnel involved in the operation of the aircraft in flight would be not only unrealistic but would represent a break with past practice. This is especially true in this industry which involves not only the safety of company property but also the safety of passengers and of the flight crews themselves. Furthermore, if we remember that the regulation that flight engineers be employed stemmed largely from the efforts of the pilots in the first instance, it would be artificial in the extreme to hold that management is barred from consulting with them about the qualifications of such personnel.

Moreover, it is not uncommon industrial practice for a skilled craft which has helpers to have a strong voice in respect to the qualifications of their helpers. Normally, they are represented by the same union so that the question as presented here does not arise at all. Still, considering the safety angle, and efficiency as well, it is difficult to accept the proposition that this skilled craft must remain silent with respect to the kind of assistants it should have.

In a tangential way, the objection that the ALPA is interfering with the FEIA's jurisdiction has been repeatedly raised by the FEIA within the AFL–CIO, with which both it and the ALPA are affiliated. In 1955, United Air Lines decided that it would thenceforth use or hire as flight engineers only men who also had pilot qualifications. The pilots supported the airline in this decision and a strike of the flight engineers resulted. The FEIA filed complaints against ALPA for not respecting its picket line and for flying airplanes during the strike. At first, the AFL supported the FEIA complaints, but after investigating the matter more deeply its major officers served as mediators and worked out an agreement which recognized the right of the management to require that flight engineers must also have pilot qualifications. Their principal concern revolved about the job protection to be given to flight engineers then employed and how they should be offered, with the help and at the expense of the carrier, the opportunity to acquire training as pilots.

Again, early in 1957, FEIA complained that ALPA was interfering with its established bargaining rights on United Air Lines. Vice President George M. Harrison, who is one of the most thoroughly experienced and highly respected trade unionists of the country, was appointed to look into the matter. He met with

representatives of the two organizations in May 1957, and then reported to the executive council:

> I think we should immediately dispose of the jurisdictional dispute. Based upon information submitted at the hearing in Washington, D. C., on May 9, by both parties, it is my conclusion there has been no violation of the jurisdictional rights of the Flight Engineers International Association by the Air Line Pilots Association. All facts in this case clearly indicate that the Air Line Pilots Association has only admitted to membership licensed airline pilots and the Air Line Pilots Association has not made any move to raid the established collective bargaining relationships now held by the Flight Engineers International Association.

It is particularly of significance that at his hearing, Mr. Harrison tried to direct the efforts of the two organizations toward merger. ALPA was willing to enter into such discussions at once, but FEIA has declined to do so.

Finally, there was a further proceeding of this kind in February 1958. The FEIA had filed charges with President Meany of the AFL-CIO that ALPA was "cooperating with the employers by encouraging its members to obtain flight engineer's licenses in order to weaken the bargaining position of FEIA on airlines all over the country," and was "informing its members that this program has the support of the AFL-CIO leadership." A committee of three AFL-CIO vice presidents, each the president of an international union, was appointed to hear the dispute. Its report, dated February 11, 1958, dealt briefly with the jurisdictional complaint and mainly with the general flight crew complement question. As to the former, the committee said:

> Regarding the charges filed against ALPA by the FEIA, the committee recommends that the Air Line Pilots be instructed to recognize the jurisdiction of the flight engineers and refrain from attempting to enlist flight engineers into membership in the ALPA.

Bearing in mind the framework of this hearing (a jurisdictional complaint by FEIA against ALPA), the comments of this committee on the flight crew complement matter are of great significance. It said:

> The job for the third crew member, or flight engineers, on airline aircraft in excess of 80,000 pounds arose from a governmental regulation adopted in 1948. The pilots and captains of the airlines contended that this regulation was necessary—creating the third crew member—on the grounds that larger, faster, and more complex aircraft required that pilots be relieved of some of their duties. When this regulation became effective, some airlines assigned a third pilot to the position; other airlines employed mechanics and some airlines used both pilots and mechanics. The third crew member is now represented by FEIA; some by ALPA and on one airline the flight engineer is represented by the IAM.
>
> This committee feels that the close relationship of the flight crew, *which is now faced with the introduction of an entire new series of larger and faster*

aircraft, powered with turbine engines, makes it imperative that the flight crew must belong only to one organization. The committee recognizes that the captain or pilot in command of an airline aircraft has the full responsibility for its safe operation and that this responsibility which is placed directly on him by virtue of his being licensed by the Federal Government and which he cannot delegate to his employer or any one else also *makes it necessary that the flight crew be coordinated into one organization.*

The committee, after hearing the arguments of both the FEIA and ALPA, can find no trade union reason why the merger of these two organizations should not become a reality." [Emphasis added.]

In considering a jurisdictional complaint, if the AFL-CIO deemed it necessary to go into the whole subject of crew complement, one can readily understand that we as an emergency board, created and instructed to investigate the dispute and to find a reasonable basis for settlement, cannot possibly avoid following a similar course.

The Exclusive Right of the Civil Aeronautics Board To Regulate Matters of Safety

The second objection raised by FEIA is that the subject of the qualifications of flight engineers is a matter involving safety reserved solely to the Civil Aeronautics Board. Some of the points already made are equally applicable to this objection. In addition, it is noteworthy that the Civil Aeronautics Board merely stipulates the minimum standards to be observed by air carriers. This may be seen in sections 601 (a) and 604 (a) of the above-mentioned Civil Aeronautics Act. The CAB has so stated several times as, for example, in the brief which it filed in the proceedings in the United States Circuit Court of Appeals for the Second Circuit in the case between American Airlines and ALPA in 1955. It is a well-known fact that it is entirely within the province of an air carrier or of a carrier acting in concert with its pilots or other employees to establish and maintain standards of operation above and beyond the minimum required by governmental regulations.

Both the FEIA and the ALPA have not hesitated in their current disputes with Eastern Air Lines to propose standards for flight engineers beyond those stipulated by the CAB. The CAB requires simply that such employees have valid flight engineer certificates. FEIA now has a provision in its agreement going beyond this requirement. It now proposes in addition that the carrier agree to use flight engineers even if the CAB should rescind its regulation requiring that such employees be part of the crew on certain types of aircraft. ALPA, on the other hand, wants the carrier to agree that flight engineers will also have pilot qualifications in addition to the certificate now called for by the regulations. Both these requests are cognizable, in keeping with established practice in the

air transportation industry, despite the fact that each would impose higher qualifications than those which the CAB has established as the minimum for flight engineers.

It should also be mentioned that the CAB has no jurisdiction over labor disputes, and that to the extent that such a dispute creates difficulties which may have an impact on safety in operations some agency other than the CAB must take a hand in correcting the problem. This supports the view that a specially appointed emergency board should reasonably be expected to inquire into such matters.

We believe, therefore, that we should investigate as fully as necessary the merits of this dispute, in keeping with the instructions given us by the President when he created these two emergency boards.

POSITIONS OF THE PARTIES

Position of the Flight Engineers International Association

The flight engineers, speaking through the officers of the FEIA, request that hereafter all occupants of the third seat in the cockpit be required to have airframe and engine (A and E) licenses in addition to the flight engineer's certificate now stipulated by the Civil Air Regulations; that an employee with these qualifications be included in the crews of all aircraft over 80,000 pounds whether required by the regulations or not, including all such aircraft under operational control of the carrier, or flown on its routes with its consent, or bearing an Eastern Air Lines trip number; that all flight engineers assigned be selected solely from the seniority list provided for in the FEIA agreement; and that, as a condition of continued employment, all flight engineers pay to FEIA, through a voluntary checkoff, such dues and assessments as are uniformly required of FEIA members, although it shall not be necessary for them to apply for membership or to be members.

The FEIA seeks to justify these requests on several grounds. It points out that the CAB has, since 1948, required a separate certificate for flight engineers; that the existence of a separate flight engineer craft was recognized by the American Federation of Labor when it issued a charter to the FEIA to represent such employees; and that the National Mediation Board recognized the existence of such a craft by certifying the FEIA on this airline, as well as on several others, as the bargaining representative of the class or craft of flight engineer. It maintains that the mechanical tasks performed by the flight engineers contribute to both safety and efficiency; that the kind of preventive maintenance possible with a flight engineer possessing a thorough mechanical training

and background cannot be provided by a pilot-flight engineer or by a flight engineer who does not have the ability to obtain the A and E license. As to its requests for the "agency shop" (the name given to the form of union security by which employees need not be members but must pay the dues and assessments paid by members), FEIA argues that the considerations which have led to the wide extension of union shop agreements in American industry are equally applicable and merit the granting of this request together with its corollary, the voluntary checkoff.

Position of the Air Line Pilots' Association

The pilots' requests are entirely incompatible with those of the flight engineers' organization. ALPA requests that every flight deck station on the turboprop and turbojet aircraft be manned by pilots; that all new pilots be required within 12 months of active service to have the flight engineer certificate; that all existing pilots be offered the opportunity to obtain such a certificate; and that before being promoted to captain, all pilots hereafter be required to obtain the certificate necessary for the manning of all flight deck stations, including that of flight engineer.

The grounds relied on by the pilots in support of these requests may be stated briefly. The new turbine-powered airplanes will fly faster and at greater altitudes than the present piston equipment, and will present operating problems which will call for the utmost in flight crew coordination. Maximum crew coordination will not be possible with one crew member not pilot-oriented, and particularly so where there is job rivalry of the magnitude and with the emotional content which has been developed by the FEIA. The nature of turbine-powered aircraft is such that piloting functions will be considerably enhanced, while mechanical functions in flight will be substantially diminished because of the introduction of automatic devices and the elimination of numerous items which now need attention on piston airplanes. The presence of three crew members, all capable of flying the airplane, will serve as a means of relieving tension and will provide greater assurance of safety. The pilots emphasize the fact that the job of flight engineer resulted from proceedings which the pilots instituted, and that flight engineers were placed aboard aircraft to relieve the pilots of certain details which they have always handled as part of their piloting duties. They therefore strongly object to the attempt of the flight engineers to extend to the turbine powered aircraft the concept that the flight engineer's job is a separate craft or occupation, contending that this would be a challenge to the legal and traditional authority of the pilot in command. The

pilots maintain that this would impair the level of efficiency and safety that will be essential under the conditions to be faced.

Position of the Carrier

The position of the carrier in this controversy is a difficult one. Officially, its representatives have maintained a hands-off, neutral policy. It realizes, however, that neither FEIA nor ALPA are willing, in the face of all developments, to permit matters to remain in status quo. At the hearings the carrier offered evidence that its experience with mechanic flight engineers on piston equipment has not shown better or more efficient results than on aircraft which it operates with all-pilot crews. It also offered some evidence as to the changes that may be expected with the advent of the turbine-powered equipment. Except in these regards, it took no position in the dispute over the merits of mechanical versus pilot-trained flight engineers.

BOARD'S DISCUSSION

This issue was debated at great length and in minute detail throughout these proceedings. Literally, hundreds of exhibits were offered in evidence and there were hundreds of thousands of words of testimony. The items covered ranged from simple expositions of industrial relations or trade union principles to the most intricate and technical discussions of the detailed changes that will be met in the turbine-powered equipment. We believe we will be of greatest service to the parties to this dispute as well as to the public if we select from this mass of material those elements which are most pertinent to the underlying considerations which should determine this dispute in a reasonable and socially responsible manner.

The Interest of the Public

First, we must bear in mind that we are dealing with a public utility with which both the Government and the public are deeply concerned. We are not governed to the same degree as in ordinary industrial labor disputes by the factors of business competition and economics. This industry is by law entitled to be subsidized by Government if despite honest, economical and efficient management it becomes necessary to do so to maintain and continue the development of air transportation of the character and quality required for commerce and the national defense. Eastern Air Lines has been off subsidy for over 20 years, being one of the first airlines able to operate at a profit without financial help from the Government. But the deep interest of the public grows out of

the possibility that Government may be called upon to extend financial aid to any air transportation company.

It is also hardly necessary to mention the grave concern over problems of safety. The present debates in Congress over the steps to be taken to meet the growing hazards of air traffic, following on the heels of a series of tragic collisions, is but one evidence of this concern. The overriding public interest must be kept clearly in mind in order to place this dispute in the proper perspective. This is not simply a private dispute between two unions, or between a union and an employer. Public interest must play a major part in its settlement.

The Carriers' Responsibility

Second, we must consider that each air carrier by explicit provision of law has the primary responsibility for the airworthiness of its airplanes and for the safety of its operations. This is in addition to its moral responsibility to provide safe operations and to its legal liability to passengers who may be injured. The Civil Air Regulations specify certain minimum qualifications for crew members but the carrier is made responsible for providing adequate ground and flight training facilities. Furthermore, the CAB and all parts of the air transportation industry understand that the regulations of the CAB are merely minimums which carriers of their own choice, or as a result of discussion or negotiation with groups of employees, may exceed. In this very case both FEIA and ALPA are asking the carrier to do so with respect to the qualifications of flight engineers. A settlement of this dispute must be reached, then, within the framework of the carriers' legal responsibility for providing safe transportation and as between alternative courses the carrier has the responsibility for making the choice, but it should be governed in making this choice largely by considerations of safety.

The Functional Relationship of Flight Engineers and Pilots

Next, we should not overlook facts which have tended to become obscured in the heated arguments between FEIA and ALPA in recent years. These are that the principal function of the flight engineers is to assist the pilot members of the crew in the mechanical operation of aircraft during flight; that the responsibility for command of the airplane and crew resides in the captain who is "responsible for the safety of the passengers, crew members, cargo and airplane," and that this responsibility is not dependent on the possession by the captain of a certificate required

of any of his crew members. The role of the flight engineer as an assistant to the pilot is an undeniable and basic fact arising out of the history of his calling. Because of a series of accidents in 1946 and 1947, CAB promulgated the regulation that a flight engineer be carried "to assist the pilot members of the crew in the mechanical operation of aircraft during flight." On airplanes on which flight engineers are not required (two-engine airplanes and all airplanes of less than 80,000 pounds), the selfsame duties are still performed by the pilots. As the Air Transport Association observed in a communication to the CAB in 1954 on behalf of all the major domestic airlines including Eastern Air Lines:

> The duties that the airlines have given the flight engineer *in flight* are only those which an aircraft pilot, not holding a flight engineer certificate, has handled normally for years. In the airlines' opinion, the pilot's capabilities for performing the flight engineer's duties in flight are so basic as to be unquestioned.

At the same time it should be borne in mind that on some airlines there has been an additional historical reason for the use of flight engineers. Pan American World Airways, for example, carried "flying mechanics" prior to the CAB's flight engineer regulation on many flights operated into stations in remote areas with minimal ground maintenance facilities. They were originally classified by the National Mediation Board with the class or craft of ground mechanics. At such stations, if ground repairs were required, the flight engineer was able to direct the lesser skilled local mechanics in the proper methods and to sign off or certify the aircraft as airworthy. Thus, on that line and perhaps on others with route patterns with comparable characteristics, the flight engineer may have an additional and important function over and above that of merely assisting the pilot members of the crew in the mechanical operation of the aircraft during flight.

However, it is a fact that on the present piston-powered aircraft of Eastern Air Lines the flight engineer is not called upon to perform this function. He assists the pilots in the mechanical operation of the aircraft in flight, monitoring instruments, dials, and gages for signs of malfunction or incipient malfunction of engines and systems. He reports such signs of malfunction to the captain, and to lead mechanics on the ground whose crews thereafter accomplish the repairs and assume responsibility for the airworthiness of the results. It is this function of certifying airworthiness which requires A and E licenses. An examination of the job description of the flight engineer on Eastern Air Lines reveals no duty which requires any license other than the flight engineer's.

Experience on Piston-Powered Aircraft

Next, it should be recalled that on piston aircraft there appears to be little difference in terms of safety as between pilot-qualified and mechanic-qualified flight engineers. Airlines employing pilot-qualified third crew members such as Panagra, Capitol, Delta, and Braniff have had satisfactory experiences and excellent safety records and show no inclination to replace them with mechanic-qualified men. At the same time, Pan-American, American, TWA, and Eastern which have flown their piston equipment with mechanic-qualified third crew members have also operated with good results in terms of safety and efficiency. In fact, the first three of these carriers recently concluded agreements calling for or continuing the A and E license requirement for flight engineers.

It is worthy of mention, however, that two airlines, United and Continental, which formerly used mechanic-engineers are now in the process of converting to pilot-engineers. It is also worth noting that Eastern found in a study of its 1957 operations that its two-engine airplanes operated only by two pilots appeared to have had better mechanical functioning than its larger equipment on which a flight engineer was carried. This was reflected in a comparision of flight-hours per engine failure, engine-hours per unscheduled removal, and overhaul costs per flying-hour, and this despite more frequent takeoffs with the 2-engine equipment. We must hasten to add that we do not regard this as conclusive proof of the superiority of pilot-flight engineers by any means. There are variables in the two types of operation which affect the engines, as for example the longer periods of climb to which the larger airplanes are subjected. It must be said, however, that this evidence raises considerable doubt as to whether flight engineers with a mechanical background necessarily provide a type of service which cannot be obtained through the use of pilot-qualified flight engineers.

On the facts disclosed by our investigation we nevertheless must find that the safety objective sought by the CAB when it promulgated its requirement in 1948 that a flight engineer be carried on 4-engine aircraft of over 80,000 pounds' maximum gross weight has been substantially achieved by the use on piston aircraft of either the pilot-qualified or the mechanic-qualified flight engineer. The choices as between the two made by airlines managements may have been dictated in some cases by the nature of their routes and the contribution a mechanic-qualified engineer can make in the matter of ground maintenance at points where fully qualified ground crews are lacking. In other cases the choice appears to have been dictated by the belief held by management that pilot-

qualified engineers contribute to better balanced and therefore more efficient and safer crews.

As opposed to the foregoing conclusion that on piston aircraft the requirements of safety are equally met by the use of either type of flight engineer, we must append one qualification. This relates to the friction which has been engendered between the two crafts and their respective organizations. We believe this to be a matter of real concern because of its tendency to preclude the degree of cooperation which is vital in operations as critical as that of flying airplanes in the air transportation industry.

The Impact of Turbine-Powered Aircraft

We are now about to enter into a period of great change in air transportation. Eastern Air Lines within a few months will receive some 40 Electra turboprop airplanes, and thereafter a number of DC–8 turbojet airplanes. This equipment will be used on the carrier's longer routes and its piston aircraft will gradually be relegated to the shorter runs. It is for this reason that the crew complement question has become critical. If the past practice of using mechanic-engineers is to be modified in favor of pilot-engineers, the time to decide to do so is now. It is important, therefore, to inquire whether the new type of operation will present problems sufficiently different from those heretofore carried on to merit the change advocated by the pilots, or, contrariwise, the change proposed by the flight engineers in favor of more stringent mechanical qualifications.

The new aircraft will be bigger, will fly higher and faster, and will have a radically different kind of powerplant. As modern equipment recently designed and engineered, it will have improved systems and many automatic devices not present on current airplanes. Obviously, the turboprops will represent less change in methods of operation than the pure jets. The Electras will fly at the 22,000–25,000-foot level, and will be perhaps 40 miles per hour faster on Eastern's routes than its present DC–7 B's. This piston equipment operates at the 18,000–22,000-foot level. The Electra will have propellers. While there will be a number of changes incorporated into the flight panel and elsewhere, there is now available a good deal of information concerning the operation of turboprop airplanes by virtue of several years' experience with the Viscount.

A far greater degree of change and uncertainty will be experienced with turbojet airplanes. Such aircraft has not been used in commercial air transportation by any American air carrier. It will fly at altitudes of 25,000 to 40,000 feet, at speeds well over 500

miles per hour; it will weigh at takeoff between 265,000 and 295,000 pounds, as compared with 125,000 pounds for the DC–7B. It will consume its fuel at the rate of 13,000 pounds per hour, and it will use up fuel at a greatly accelerated rate at altitudes below its indicated cruise level. Once committed to come in for a landing, it will be practically imperative that it proceed to do so. Because of its speed and other characteristics, careful flight planning will be required and, upon meeting unanticipated weather or other conditions, prompt and accurate flight replanning will be necessary. Runways will provide less tolerance, and air temperature at takeoff will make material differences to the pilot in the handling of the airplane. Most of the flying done by this kind of aircraft will be on instruments, and for some years to come, until plans to improve air traffic control are perfected, the utmost in vigilance will be needed to avoid collisions. Not only will there be the hazards of a gradually enlarging volume of air traffic, which has been going on for years and has caused several tragic collisions as well as innumerable near-misses, but the introduction into the stream of traffic of this new, much faster equipment, with its rapid rate of climb and descent, will aggravate the problems of air traffic. The pilots will have a heavy load of communications work to do, plus a good deal of paperwork, and at the altitude and speed of this aircraft navigation will impose more care on the pilots because of the greater effect of slight deviations and of the declining accuracy of navigational aids at higher altitudes. They will have to be more certain about wind conditions aloft, and meteorological problems will assume increasing importance.

At altitudes above 25,000 feet the danger of sudden decompression becomes acute, and mental inertness, if not complete unconsciousness, could follow within seconds. Until a good deal of experience has been had, it will therefore be prudent and necessary to have oxygen masks readily available for the pilots. Some experts believe that at least one pilot should be compelled to wear an oxygen mask constantly while flying above 25,000 feet. This will obviously add to the discomfort and to the burdens of the pilots.

It is evident that the piloting duties and difficulties will be greatly enlarged in the operation of the jet airplanes. Split-second decisions and maneuvers will have to be made, and all functions will be carried on at a greatly accelerated pace. The fatigue factor will then become increasingly important, and the need for relief more pressing. It would seem that in such operations it would be foolhardy not to have two pilots in their seats actively functioning as pilots at all times. This points up the value of having another person in the cockpit, capable of serving them in a relief capacity.

In more direct terms, how will the jet airplane affect the issue of mechanic versus pilot flight engineer?

The outstanding effect may be seen in the placement of all flight control items, together with others previously within the control of the flight engineer, in the pilots' panel. This is especially significant when it is coupled with the automation and simplification of features heretofore manipulated or operated by the flight engineer.

We see evidence of this trend in the specific changes made, concerning which a great deal of evidence was offered. We note, for example, the elimination of propellers, temperature control in the cylinder heads, cowl flaps, ignition system, engine analyzer and similar items, and the simplification of the lubricating system and the heating, deicing, and pressurization features. These and other similar changes will tend to decrease the duties and responsibilities of the flight engineers. At the same time, the pilots will find on their panel fuel and fire controls, and other items will be readily accessible to them. Added to this is the fact that many of the systems and features will be automatic with alternates available in case of malfunction. An illustration of this will be the four generators; when one fails, warning will be given and the remaining generators will be able to carry the load.

All in all, we note a great diminution in the importance of the mechanical functions of the flight engineer's job by the simplification or elimination of various items and the simple technique of going to an alternate if something fails. It is difficult to find any items which can or will be repaired in flight. At the same time, it is significant that the controls of various working systems are being transferred to the pilots, which, added to the flying difficulties resulting from the great rise in speed and altitude, at the very time that traffic congestion is becoming increasingly troublesome, will certainly tend to enlarge the piloting burdens and responsibilities.

The reason for CAB's regulation requiring the use of a flight engineer was that it was deemed wise in the interest of safety to provide help to the pilots in the operation of large, four-engine airplanes. At the time, those airplanes were piston powered and certain duties incident to such operations were delegated to the third crew member subject to the control and direction of the pilot in command. The captain throughout was clothed with authority over, and responsibility for, the entire crew. In Lockheed airplanes and in Boeing 377's, because of the configuration of the cockpit, there are more duties for the flight engineer to perform. On Douglas equipment there has been no separate flight engineer station, so that the nature and manner of his work has been different from that on the Boeing and Lockheed aircraft.

The question now is whether the work and responsibilities of the flight engineer on the jet aircraft will be sufficiently different vis-a-vis the pilot as to warrant a reexamination of the basic qualifications of his job. The experience of the Air Force furnishes some light. Military jet aircraft have been flying for a number of years, including the KC-135 tanker, the military prototype of the Boeing 707 which will be used in passenger service. The Air Force is, of course, very much safety-conscious, and it does not face the same competitive business problems which the commercial airlines have. Nevertheless, its B-47 and B-52 bombers have no station for a flight engineer, and the KC-135 is also operated without a flight engineer. Earlier bomber types carried flight engineers. It would certainly seem that this indicates something regarding the essentiality or indispensability of the mechanical type of crew member in the operation of large modern jet airplanes.

It is not disputed in this case that the pilots will need help on the jet transport equipment. Their changing, more precise and critical duties outlined above demonstrates this. The question is simply what type of help the third crew member can best provide. To furnish them with a mechanic whose capacity to provide the kind of assistance they need is very limited, in the light of the problems they face, does not appeal to reason. What the pilots need is someone who can relieve them of some of their innumerable and important flying duties, with the purpose not only of making their workload more tolerable, but, more important, of promoting safety. There are many uncertainties at present about how the jet aircraft will perform. It is certain that with their great speed and altitude they will introduce additional problems of a piloting nature while curtailing those of the mechanical type.

If one is to err in establishing the qualifications of the third crew member, it should be on the side of caution. These will be airplanes carrying more than 120 passengers, and they will be large, complex, and very expensive pieces of equipment, costing over $5 million. Both the carrier and the pilot in command, the captain, are morally and legally responsible for these lives and for this property.

We know that the mechanical function will be substantially less than in present piston airplanes. If something fails, alternates are available. If certain things fail, the only course will be to land the airplane. It is not anticipated that mechanical repairs of any major kind will be able to be made in flight. To suggest, therefore, that the third crew member, placed on the airplane by Government decree for the explicit purpose of helping the pilots by relieving them of some of their tasks, have his qualifications stepped up at

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this time by requiring a higher degree of mechanical training and experience is completely unwarranted and unrealistic.

The obvious need is for a crew member who can perform some of the myriad of duties that will be carried on by the pilots. These include navigation, communications, alert observation, flight planning, varieties of paperwork, and primarily the ability to operate the airplane at least to the extent of landing it in case of emergency. If he can occupy the copilot's seat periodically, so that the pilot may from time to time relax, this in itself would make a contribution toward the maintenance of pilot alertness and hence to efficiency and safety.

The principal justification, as we see it, for the FEIA's proposal that flight engineers should hereafter have the A and E licenses or be discharged is the desire to make an irrevocable, separate craft of this job. There will be no functional basis for such licenses on the turbojets, and this job was not so conceived when it was created. This would not only withhold the more valuable and usable abilities and qualifications outlined in the preceding paragraph, but would tend to aggravate the jurisdictional conflict between the pilots and the flight engineers. The dissension already caused by this conflict is most unfortunate, and in our judgment tends to prevent the kind of cooperation and coordination which is absolutely essential in the cockpit of an airplane. Any interference with complete coordination of the flight crew in the new turbojet aircraft, however slight, will be completely intolerable and unpardonable.

The very reverse is desperately needed. The crew must work as nearly as possible as one man. They must think alike, they must instinctively understand any problem that arises, and must be so similarly oriented that they will immediately respond to the moves or desires of the pilot in command.

The rational answer is that in addition to the mechanical qualifications called for by the flight engineer's certificate, the third crew member should also have such piloting qualifications as will enable him to be of genuine help to the pilots.

We observed earlier in this report that the determination of the qualifications of flight crew members is basically a matter for the management of the airline, subject to the minimum standards established by Government. The recommendation we shall make to Eastern Air Lines would in our judgment be a reasonable exercise of this management function.

Protection of Job Equities

The antagonism between the FEIA and the ALPA grows out of two underlying fears of the flight engineers: (1) that the pilots

seek to oust them from their jobs, and (2) that ALPA wants to take over and "submerge" FEIA to the detriment of its members.

Whatever may have been ALPA's intention at one time, it is now willing to discuss merger under the auspices of the officers of the AFL–CIO and in accordance with such terms and conditions as they may deem proper. All we care to say on this subject is that the avoidance of unnecessary and harmful jurisdictional disputes is an important policy of the federation, and that, consonant with its constitution, it encourages the voluntary amalgamation of unions with conflicting interests or overlapping jurisdictions. The fear of submersion which FEIA has stated is not unique. Other small organizations have had similar fears, yet ways have been found to safeguard their interests through contractual or constitutional provisions which have given assured rights to the smaller group that it will be adequately represented on governing bodies and negotiating committees.

The primary fear is that relating to job protection. There is uncertainty as to what will be the impact of the new turboprop and turbojet on employment.

We recognize this as a valid fear. Flight engineers who have entered this field of employment, some as much as 10 years ago, perhaps leaving other kinds of employment to do so, have an equitable right to be protected in their present job.

If our recommendation is accepted that the flight engineers on turbojet aircraft be required to have certain minimum pilot qualifications, we shall suggest that the present seniority rights and job rights of incumbent flight engineers be continued on all piston equipment and also on the turboprop equipment. Logically, perhaps, our major recommendation should cover turboprop as well as turbojet airplanes, but we do not intend that it should. The turboprop equipment will in many important respects be operated at altitudes and speeds little different from those of the newer piston-powered airplanes. It cannot be denied that the power plant will not be of the reciprocating engine type and that some of the systems and features of turbojets will be included in the turboprops. Nevertheless, in recognition of the equity which the flight engineers have built up in their jobs, and frankly as a means of overcoming their fears and in meeting the difficult problems of the transitional period, we propose that turboprop equipment be classified with piston equipment for the purpose of providing jobs for incumbent flight engineers in accordance with the seniority rights they now have on their own seniority list.

But, and this is exceedingly important, under the program we recommend, the jobs for flight engineers will not be restricted

to piston and turboprop airplanes. For those who can and are willing to do so, we propose that sufficient pilot training be offered at the carrier's expense to qualify them for jobs on any aircraft, including the turbojets. Those who would desire to move up the seniority ladder as pilots could then do so, preserving and accruing for a reasonably satisfactory period (sufficient to protect them against the impact of furloughs as pilots) their seniority rights on the present flight engineers' roster. They would thus have job opportunities as pilots *in addition* to those as flight engineers.

For those flight engineers who are unable to qualify fully as pilots for physical or other reasons and yet desire to be qualified for places in the crews of turbojets, the possibility is suggested that they be given sufficient training to develop the sense of airmanship which is characteristic of pilots and which would enable them in an emergency to fly the given airplane. This would mean the minimum of a commercial pilot license and an instrument rating. They would be able at least to fly and land the airplane in an emergency. But for the history of the past 10 years, our recommendation would be that all flight engineers on jet aircraft be fully qualified pilots, but the coordination and orientation within the flight crew which we consider vital in crews on jet airplanes could at least be approached and reasonably approximated by this means, with due regard to safety, and at the same time the impact of the changed policy would be cushioned so far as present flight engineers are concerned.

A flight engineer taking such pilot training will presumably do so on his own time, although at company expense. If he elects to serve as a copilot thereafter, either because he desires to be trained fully as a pilot in accordance with the carrier's requirements or because he wants to determine whether he will choose to progress as a pilot, his seniority on the flight engineer list should continue to accrue for a period of time sufficient to enable him to be assured that he has not lost his job protection in the event he becomes subject to furlough as a junior copilot. By the same token, in order that there be mutual benefits for both groups of employees, and that the basic policy we propose be advanced, there should be similar rights and protection for pilots who elect to be trained as flight engineers. Their seniority on the pilot roster would then be maintained and seniority would continue to accrue to them on that list for a period of time sufficient to provide them with protection similar to that recommended for flight engineers.

By this means, the accrued seniority of each group on their own list would afford them protection against displacement by mem-

bers of the other group who come into their occupation, and the normal desire to broaden their qualifications and training would not be restrained by the fear that in doing so they may forfeit their seniority on their original list and thereby endanger their employment rights.

The fear which this program is designed to meet is principally that of the flight engineers. It will be seen that the seniority roster of the flight engineers would continue in effect, and all assignments to flight engineer positions would continue to be made from this list. As to piston and turboprop equipment there would be no change in their qualifications. Flight engineers who desire to serve in the flight crews of turbojets would likewise be selected from the flight engineers' seniority list but only those who have the pilot training described above would be qualified to serve in such crews.

This will make it necessary that appropriate and coordinated seniority provisions be added to the collective-bargaining agreements of both FEIA and ALPA. The welfare and interest of their respective constituents demands this, and the common desire of all to cooperate with their carrier for the sake of efficiency and safety dictates that this be done, as we view the situation. It will present difficulties, but if the value and fairness of such an agreement is recognized it can readily be accomplished through joint consultation, perhaps in the initial stages under the auspices or with the help of the officers of the AFL-CIO. These officials have frequently proffered their help to achieve harmony along constructive lines between these two labor organizations, and there are good grounds for saying that they are still ready, indeed eager, to do so now.

Under such a program those who have been fearful and suspicious can be completely disabused. The purpose will be primarily to conduct the operation of turbojet aircraft on the most cautious and safe basis, in the paramount interest of the public. At the same time, all the legitimate job equities and interests of incumbent employees will be satisfactorily protected.

FINDINGS

By way of summary as to the crew complement issue, we find that:

1. The basic purpose of the CAB in issuing its 1948 regulation by virtue of which flight engineers are required on large 4-engine aircraft was to promote safety by providing pilots with help capable of relieving them of some of their manifold duties, largely of a mechanical nature, associated with that type of equipment.

2. These functions performed by flight engineers on large piston-powered aircraft were prior to said regulation performed solely by the two pilots who constituted the flight crew, and, at the present time, on all 2-engine and on 4-engine equipment of less than 80,000 pounds these functions are still performed solely by such two-pilot crews.

3. On all flights the pilot in command, the captain, is legally and traditionally responsible for the safety of the passengers, crew members, cargo and airplane, and, consequently, is entitled to have a strong voice as to the qualifications of those serving under him in the flight crew. Aside from this special condition applying to air transportation, it is customary in American industry for craftsmen to be invited to express views concerning the nature and qualifications of those who assist them.

4. The legal and moral responsibility of the air carrier for the airworthiness of its equipment and the safety of its operations has led to accord that the carrier is the ultimate judge of the essential qualifications of flight crew members; in exercising this judgment the carrier must meet the minimum standards imposed by law and is expected to act reasonably, which implies that it will consult the pilots, who have a similar responsibility in flight, as to what constitutes such essential qualifications.

5. In the operation of piston equipment in the past 10 years some airlines have used flight engineers of the mechanic type while others have used pilot-qualified flight engineers; in terms of safety and efficiency the two kinds of operation have been equally satisfactory.

6. The requests of FEIA to make the aircraft and engine (A and E) licenses mandatory, to require that such employees be carried on all aircraft irrespective of what the CAB may rule, and to establish the agency shop and voluntary checkoff are designed primarily to exclude pilot-qualified flight engineers from such positions, not only on present equipment but on the future turbine-powered aircraft as well, and, in the light of the facts submitted to us, are not justified.

7. The changed nature of operations to be faced in turbojet equipment calls for a careful reexamination of the necessary and desirable qualifications of the flight engineer on such airplanes.

8. Bearing in mind that the purpose of requiring flight engineers to be included in flight crews is to promote the safety and efficiency of operations by having them assist the pilots by relieving them of some of their many duties, we are convinced that on Eastern Air Lines it would be better to require that the flight engineer on the turbojet airplane have the basic qualifications of a pilot and that he be able in an emergency to take over some of the flying duties of the pilots.

9. Our principal reasons for arriving at these conclusions are:

(*a*) Safety is paramount, and it is wiser to employ too much caution than too little.

(*b*) The introduction into air traffic of these very large, fast, high-flying, and rapidly climbing and descending airplanes, will aggravate the already critical problems of traffic density and control, and will materially increase the burdens of the pilots.

(*c*) A number of items within the control of the flight engineer on piston aircraft will either be eliminated or transferred to the pilots panel, and in addition most of the systems will be much more automatic and in case of malfunction will have alternates available.

(*d*) Under the job description of flight engineers on Eastern Air Lines there is no duty which calls for the A or E license, and it will be even less likely that turbojet flight engineers will have any functions which will call for such qualifications.

(e) The uncertainties associated with airplanes which will fly at altitudes of 25,000 to 40,000 feet, at speeds well in excess of 500 miles per hour, and which will consume their fuel at a greatly accelerated rate at the lower levels induce one to believe that the entire flight crew should be pilot-oriented and coordinated so that necessary action can be swiftly taken and the pilots engaged in active flying duties may be relieved of some of their related tasks, as, e. g., communications, navigation, paper work, flight planning and re-planning, as well as that there be available a third crew member capable of flying and landing the airplane in an emergency.

(*f*) The Air Force operates modern, large jet aircraft without mechanic-flight engineers, although they were used on prior models; the KC-135 tanker, which is the prototype of the Boeing 707 passenger air transport, is also operated by the Air Force without a mechanic flight engineer.

(*g*) While other airlines differ as to the desirability of pilot or mechanic flight engineers, depending apparently on the practices they have followed in their piston-operations and their particular problems, some requiring pilot qualifications and others mechanic qualifications, two domestic trunk airlines which formerly used the mechanic type are now transferring to pilot flight engineers.

10. The turboprop aircraft, however, will fly at altitudes and speeds only moderately in excess of those of modern piston equipment, and for purposes of the qualifications of flight engineers can safely be classed with the piston rather than the turbojet airplanes; on Eastern Air Lines this means that there will be positions for 170 incumbent flight engineers with their present qualifications on its first 40 Electras, as well as the positions remaining available on piston aircraft; in addition it is expected that a substantial number of the present flight engineers will be able to qualify for turbojet operations.

11. The issue before us relates to the qualifications of the third flight engineer certificate now required by regulations, and not to the labor organization which shall represent them as bargaining representatives; we are, therefore, not intruding ourselves into the jurisdictions reserved by law to the National Mediation Board or the Civil Aeronautics Board.

12. Although the AFL–CIO has held that changing operating conditions make it "imperative that the flight crew must belong only to one organization" and, again, that it is "necessary that the flight crew be coordinated into one organization," and despite the concern expressed by the FEIA that this would "submerge" its organization, we do not deem it proper for us to make any recommendation on this subject, leaving that to the two organizations and their parent federation, the AFL–CIO.

13. The overriding public interest in safety and efficiency, taken together with the pressing need of terminating the current interunion friction and replacing it with harmony and coordination, dictate that means be promptly devised to meet the operating problems to be faced when the turbojets come into use and at the same time to afford flight engineers now employed by Eastern Air Lines reasonable and necessary job protection and opportunities.

IV. THE ECONOMIC ISSUES

Pay and Retroactivity

The association requested changes in the components of their pay formula which would have yielded an 8th-year captain and an 8th-year copilot flying 85 hours half day, half night, increases in monthly earnings as set forth below:

Equipment	8th year captain			8th year copilot		
	Present yield	Proposed yield	Increase	Present yield	Proposed yield	Increase
M–404	$1, 312. 63	$1, 442. 68	$137. 75	$831. 32	$918. 19	$86. 87
CV–440	1, 317. 73	1, 449. 05	131. 32	833. 87	921. 51	87. 64
L–749	1, 482. 78	1, 651. 08	168. 30	916. 39	1, 026. 56	110. 17
L–1049	1, 564. 38	1, 763. 70	199. 32	957. 19	1, 085. 12	127. 93
L–1049C	1, 645. 13	1, 869. 95	224. 82	997. 57	1, 140. 37	142. 80
L–1049G	1, 648. 53	1, 874. 20	225. 67	999. 27	1, 142. 52	143. 25
DC–6B	1, 537. 18	1, 729. 70	192. 52	943. 59	1, 067. 44	123. 85
DC–7B	1, 716. 53	1, 937. 95	221. 42	1, 033. 27	1, 175. 73	142. 46
Electra	----------	1, 993. 63	--------	----------	1, 204. 69	--------
DC–8	----------	2, 741. 63	--------	----------	1, 593. 65	--------

The company's proposal was to scrap the present pay formula and substitute for it a formula based on hourly pay graded by equipment to be flown, coupled with a minimum monthly guarantee. The company's proposal would have yielded a wage increase of varying amounts.

There are equities in favor of a wage increase, though not of the magnitude sought by the pilots. The parties' current agreement was made effective June 1, 1956. Since then there have been wage movements in all of American industry especially during the prosperous second half of 1956 and 1957. These employees have not participated in that advance. Even more significant have been the changes in pay levels negotiated on other airlines which have resulted in pay yields on Braniff, Delta, National, Continental, TWA, and United that are in excess of those on Eastern, which has historically been among the leaders in the matter of pilot pay. In addition, the pilots with justification seek a wage increase to offset the erosion of their incomes resulting from increases in the Consumer Price Index since their current agreement was signed and to share in the growth of the economy as a whole.

As against these considerations, which outline the limits within which a wage recommendation might properly fall, is the fact that the current recession has had a marked effect on Eastern's gross

revenue and that it is about to enter a period of heavy expenditures for new equipment, of heavy costs for training and of general uncertainty. There is no question, of course, of the financial strength and soundness of this company and these considerations do not touch on the factor of ability of the business to meet legitimate increases in wage costs. But we must weigh, along with those factors pointing in the direction of a wage increase, the fact that the company's current operations, if considered in isolation, might not justify it. This fact must temper our judgment as to the amount of the pay adjustment to be recommended.

Our recommendation, then, represents our best judgment of the result of these competing equities. It also reflects an attempt on our part to maintain the relationship in pay yields as among flight crew members as they have existed on this airline. In the close confines of the cockpit the relationship between the pay of the several jobs should be altered to any significant degree only if a strong showing is made of a change in job worth vis-a-vis the other flight deck statoions. Otherwise the reactions likely to be caused can adversely affect the necessary coordination among crew members.

Our recommendation will propose changes in the existing pay formula calculated to yield the ninth year captain and copilot flying 85 hours half day, half night, the following monthly pay yields:

TABLE A

Equipment	9th year captain			9th year copilot		
	Present yield	Recommended yield	Increase	Present yield	Recommended yield	Increase
M-404	$1,312.63	$1,424.00	$111.37	$831.32	$918.08	$86.76
CV-440	1,317.73	1,429.10	111.37	833.87	920.73	86.86
L-749	1,482.78	1,585.65	102.87	916.39	1,002.14	85.75
L-1049	1,564.38	1,667.25	102.87	957.19	1,044.57	87.38
L-1049C	1,645.13	1,748.00	102.87	997.57	1,086.56	88.99
L-1049G	1,648.53	1,751.40	102.87	999.27	1,088.33	89.06
DC-6B	1,537.18	1,640.04	102.87	943.59	1,030.42	86.83
DC-7B	1,716.53	1,832.15	115.62	1,033.27	1,130.32	97.05
Electra	----------	1,918.85	--------	----------	1,175.40	--------
DC-8	----------	2,334.50	--------	----------	1,391.54	--------

The recommendation will include the addition of a ninth-year bracket to the base pay structure. This type of recognition for longevity is now a feature in agreements of at least four other domestic trunk carriers and is also warranted in this case.

Foreign and Overseas and Offshore Pay

We shall recommend an increase in the present rates of $2 for each hour flown by first pilots and $1.05 for each hour flown by copilots in the company's foreign and overseas operation. We propose that these amounts be increased to $2.50 and $1.30, respectively. Higher payments for foreign and overseas flying is currently a feature of the agreements of several carriers.

We shall recommend withdrawal of the pilots' request for an increase in the override for offshore flying. This flying is done on the overwater route between West Palm Beach and Wilmington, N. C. National flies this route, paying its pilots, as a result of a recently negotiated agreement, the same rate for offshore flying as is now paid by Eastern. Northeast Air Lines also flies this route but does not pay any offshore premium.

Traveling Expenses

The agreement provides an expense allowance of 40 cents per hour while away from base station. The association proposed an increase to 65 cents per hour. The company offered to pay specific meal, hotel, and transportation allowances or to establish an hourly rate for hours of layover.

The company contends that it is paying enough expense money to cover all expenses if allocated only to those incurring expense. That is undoubtedly true because on some runs the pilots have little or no expense but receive the hourly allowance. That however has been the system in effect for years, the association resists a change and it is unrealistic to attempt to alter it completely. That being the case, however, any additional money should be allocated to those who really have expenses and suffer a loss due to increased prices of meals and lodging.

Accordingly, we recommend continuation of the present hourly rate provisions and an allowance of $3 to pilots with layover away from base of 10 hours or longer, except for those on foreign and overseas trips where hotel accommodations are provided by the company. Similarly, pilots assigned to training away from base should be allowed $3 each 24 hours, in addition to the 40 cents per hour, except in those cases where the company elects to provide sleeping accommodations.

Base Pay Deductions

The association proposed a provision that there shall be no base pay deduction for a pilot off pay status for part of a month if the hours flown equal or exceed the applicable monthly guarantee. The evidence offered to support that proposal dealt largely with

absence or leave of absence for personal reasons or association business and with the application of the company's policy thereon. The contract presently provides for proration of the monthly guarantee in such case so the proposal might raise some problems in connection therewith.

From the evidence it appears that a more realistic approach would be proration upon the basis of average monthly flight time, and our recommendation will be in accord therewith.

Reserve Pilot Guarantee

The association proposed changes in the reserve pilot guarantee provision to increase the guarantee from 60 to 70 hours, and to eliminate reference to a DC–3 minimum. Since the company no longer uses the DC-3, the latter request is proper. For the same reason the examples of prorata guarantee should be revised and they should also reflect changes in rates of pay.

The reserve pilot is paid first pilot rates when used as such, and copilot rates when so used. The guarantee is at the higher first pilot rates and if a pilot serves 1 day in any month as a first pilot, he gets the guarantee for the full month. The 60-hour guarantee at first pilot rates yields more pay than 80 hours' service as a copilot. Considering that and the fact that a 70-hour guarantee is not customary on domestic airlines, there is no valid basis for the proposal, and that part of it should be withdrawn.

We concur with the proposal to eliminate the word "major" from section 10–B so that it will be applicable to all bases.

Duration of Agreement and Retroactivity

We recommend that the parties conclude an agreement to become effective on the first day of the month following its execution and to expire on April 1, 1960. We are of the opinion that there should be this minimum period of stability in their relationship in order to permit them to cope with the many problems that will be presented by the introduction of turbine-powered aircraft.

As to retroactivity, we recommend that retroactive pay be granted in an amount equal to 7 percent of each pilot's earnings between June 1, 1957, the date of expiration of the prior agreement, and the effective date of the parties' new agreement.

We recommend this form of retroactive pay because it avoids the cost and delays of making individual pay computations on the basis of the revised pay components. And yet the figure of 7 percent reasonably approximates full retroactivity to the expiration date of the prior agreement. If the parties had settled promptly after June 1, 1957, on an agreement of 1 year, it is likely

that the sum total of pay benefits would have been somewhat less than this figure. Had they settled at various points of time in the intervening year, their wage settlement would probably have varied depending on the bargains struck in the meantime on other properties. We are of the opinion that the figure and method of retroactive pay computation suggested represents in principle full retroactivity to the expiration of the prior agreement, as measured by the amount of adjustment that would then have been reasonable and likely.

V. RETIREMENT PLAN

The carrier has had a group benefit annuity plan for its employees since 1947. The pilots are part of this plan and contribute percentages on a sliding scale which average out to 4.7 percent of earnings at the $12,000 level. The benefits now are 1 percent of the first $3,000, and 1¾ percent above $3,000. Employees become eligible after 3 years and their rights vest after 10 years.

The pilots desire to have this plan revised to make it conform to what they call "the standard ALPA plan," which, aside from a number of detailed items, means that they want a variable annuity fund to which both the pilots and the carrier will contribute, in addition to the present fixed benefit plan. On all domestic trunk carriers as well as on international and several feeder airlines, they have the type of plan they are now requesting of Eastern.

During the mediation and negotiation phases of this proceeding following the close of the hearings, the parties agreed that a variable annuity fund, called a "B fund" should be added to Eastern's retirement program. They agreed this should be made up through contributions of 6 percent of earnings, with the pilots and the carrier both contributing. They agreed on the purpose of the fund, which is to serve as a cushion against inflation by being invested in common stock equities, and they reached accord on the principal administrative features.

Their differences, on which we are now expected to make recommendations, relate to: (1) the respective amounts of the carrier's and the pilots' contributions to the B fund, (2) the eligibility feature, (3) the disability feature, (4) minimum amount of pension benefits, (and 5) optional additional contributions of the individual pilots to the B fund.

The amount of the contributions to the B fund by the carrier is related to the amount it now provides for the fixed benefit plan, which will be continued, and to the increased labor costs it is assuming by reason of other changes it is about to make in the employment contract.

It is not disputed that Eastern's present fixed annuity plan added to a 6 percent B fund will provide benefits comparable with those under other so-called standard plans. Some B funds have larger contributions but this is offset by the fact that Eastern's fixed annuity plan is somewhat more costly and gives somewhat better benefits than other A plans, which is what the fixed benefit plan is usually called.

We must observe that in fact there is not any one standard retirement plan. They vary in cost, in other particulars, and in the amount of the benefits. But there is enough in common to indicate generally an approach to a pattern. However, in estimating the amount of the benefits that will be available, one runs into the difficulty of deciding what rate of return should be allowed for the B fund. The pilots use a figure of 5 percent per year; the Carrier bases its computation on a 3-percent return. Obviously, over a normal working period of 30 years, this makes a substantial difference in the estimated benefits.

On Eastern Air Lines the employees contribute an average of 4.7 percent to the present A fund. On other airlines their contributions to *both* the A and B funds are approximately: 7 percent on American, Continental, National, and Northwest; 6.6 percent on Braniff and Delta; 6.8 percent on Capital; 7.9 percent on United; and 9.8 percent on Western.

If Eastern's pilots contributed half of the 6 percent needed for the proposed B fund, their total contributions would be 7.7 percent, which they insist would make them pay more than is generally paid for comparable benefits. They claim that Western has a "sport" plan and must be disregarded and that United's pilots will receive materially greater benefits than will be available from Eastern's proposed plan. This the carrier disputes, comparing two 30-year pilots who retire at age 60, but as already stated, the dispute arises out of the uncertain percentage of income to be earned by the B fund. If it is 3 percent the carrier is correct; if it should be 4 or 5 percent the pilots are right.

We conclude that the relatively larger contribution the pilots make to Eastern's fixed benefit plan should be offset by a slightly lesser contribution to the B fund. Our best approximation is that total employee contributions of 7.2 percent would be fair, and would be reasonably in line with the expected benefits, giving the company due consideration because at this moment it is being asked to inaugurate this new feature in its retirement program and at the same time to grant wage increases. It is true, on the other hand, that Eastern is the last of the domestic trunk lines to provide a variable annuity plan, which has given it a cost advan-

tage for a period of time. This means that the carrier's contribution to the B fund will be 3½ percent while that of the employees will be 2½ percent.

There were a rather large number of additional pension requests made to bring Eastern's plan in line with standard airline plans. These have now been narrowed down, and we shall recommend affirmative action only as to those which we believe seriously need attention and then only to the extent of bringing them within the range of such features on other airlines; in other words, we shall not propose that Eastern in each particular match the most generous or superior provisions.

Eligibility is one such feature. Eastern now has a 3-year eligibility rule. Several air carriers make their employees eligible after 1 year, but there are some which have 2- or 3-year rules. If this were to be decided solely by reference to the prevailing practice, a 1-year eligibility would be indicated. We are nevertheless not going to recommend any change in the present 3-year rule because of the heavy costs the company must absorb by reason of these other features of the recommendations we are making: the general wage increases, the costs to be incurred in providing flight engineers with pilot training under the crew complement issue, and the inclusion of the flight engineers in the B plan because we believe that in all essential respects they should have treatment comparable to that of the pilots.

Eastern's pilots get full vesting rights after 10 years of service or 10 years after participation in the plan starts. It has no provision for vesting upon physical disability as a pilot. In this respect it stands out as a sharp exception in the industry. It hardly calls for a dissertation to establish why pilots on Eastern should not be deprived of this essential protection, and we shall so recommend.

On several airlines the pilots are privileged on a voluntary basis to make larger than normal contributions to the B fund to build up their credits and benefits. So long as they do so in round percentages and may change their basis of contribution only at stipulated times, we fail to see why this option should be withheld from Eastern's pilots.

The association has also requested that pilots participating in the pension plan be guaranteed minimum benefits, and that this be applied as well to those already retired. From the employees' viewpoint this is surely a desirable feature, and there is some precedent for it, but largely for the reasons mentioned in declining now to reduce the eligibility requirements we are suggesting that this request also be withdrawn at this time.

VI. MISCELLANEOUS ISSUES

Hours of Service

Under this heading the association proposed a number of changes in section 17 of this agreement as well as in other provisions related thereto, designed, as they put it, to improve the working conditions of the pilots. They had in mind the abnormally long periods some pilots must be on duty or away from home to obtain a reasonable number of flight hours on which their earnings are mainly based. These conditions are faced principally by the pilots with less seniority who by the bidding process find themselves assigned to schedules in which there are numerous stops, with attendant ground delays, or in which the nonproductive time is great in relation to the flight hours achieved. Frankly admitting that this carrier has tried to meet this problem and to a degree has done so by means of the 3-4-5 formula included in sections 17 C, D, and E of the existing contract, the pilots maintain, however, that it is possible to make further corrections.

It is our opinion that the junior pilots have a just complaint on this score and that some relief should be found for them. This cannot be found in the device of reducing flight hours, for this would simply restrict the ability of a pilot to be productive or to attain his possible monthly earnings.

There are legal and contractual limits to the number of hours a pilot may fly in a given period. This provides a fulcrum, it would seem, around which to develop related restrictions. The parties have indicated such an approach in their current agreement by stipulating certain minimum numbers of flight hours depending on the scheduled on-duty hours of each pilot on each day. (Three hours minimum if the scheduled on-duty time is between 4 and 8 hours, 4 hours if between 8 and 12 hours, and 5 hours if over 12 hours.)

We propose that this formula be modified by providing that the minimum flight credit be 1 hour for each 2½ hours of on-duty time, prorated, for all on-duty hours in a day exceeding 8, leaving the present formula unchanged with respect to hours under 8.

We also believe that a pilot who is away from his base for relatively long periods should be assured a reasonable amount of flight time. The practice of allowing 1 hour of flying for each 4 hours away from base has developed in this industry, and should be adopted in this airline.

The flight-hour credits under the on-duty ratio and under the away-from-base ratio should obviously not be cumulative. The greater of the two in terms of flight-hours produced should apply in any instance.

In order that these ratios help accomplish the intended purpose, we propose that flight time for pay purposes also count as the hours of flying for flight time limitations. This may restrict a pilot's earnings, but it will help the pilots who have the most inferior schedules to improve their working conditions.

These suggestions are in lieu of the trip-hours, a tour- or duty-hours and similar proposals made by the Association and are made because the problem is recognized and we desire to meet it as directly as possible. We do not favor the course of offering money as an offset to an undesirable number of hours on duty. It would seem that the carrier in making up the schedules and the pilots when bidding would govern themselves by these restrictions and could know with much more certainty in advance what they may do or expect. This is a desirable and meritorious objective.

Miscellaneous Flying

The association proposed several additions to and modifications of section 13 of the agreement.

1. It proposed inclusion of extra section and nonscheduled flights in the provisions for posting assignments 24 hours prior to takeoff time. There is no evidence that the present provision or its application creates any hardship. Accordingly we recommend it be withdrawn.

2. It proposed a guarantee of pay for flights upon which a pilot is scheduled 24 hours in advance, if ordered by the chief pilot not to fly it when available. No evidence has been presented to show any hardship or monthly loss of earnings by the application of the present contract povisions, so we recommend it be withdrawn.

3. It proposed a guarantee of 1 hour pay and credit when called to the airport for flights of a special nature even though no flying is done. In the event a pilot is so called out and is released from duty before starting another assignment, there is merit to the proposal. We recommend that section 13–C be amended accordingly.

4. It proposed an additional provision to guarantee pay and credit to an available pilot for flights flown by supervisory or engineering pilots. Supervisory pilots must do some minimum flying to remain qualified and familiar with the routes. There is no evidence of excessive use of such pilots nor of any hardship to or loss of earnings by the line pilots because of such practice, which has been in effect for years. We recommend that the proposal be withdrawn.

5. It proposed that when equipment is substituted the pilots be paid for the equipment scheduled or the equipment flown, whichever produces greater earnings. It appears that there are as many substitutions of higher rated equipment for lower rated equipment as vice versa, so on the average no loss of earnings occurs. Some substitution of equipment is inevitable and since no real inequity has been shown there is no justification for the higher cost to the company, and we recommend that the proposal be withdrawn.

Probationary Period

The agreement provides that a copilot shall be on probation for an aggregate of the first 12 months of his service on flying status. The company proposed to add "or until he has flown 1,000 hours, whichever is later." The seniority and bidding procedures do not allow a probationary pilot to do much flying and he can not be regularly assigned with any one first pilot who could then evaluate his work. These are real problems but it appears that our recommendation for modification of section 28–I–1 affords appropriate relief. Accordingly we recommend that the proposal be withdrawn.

Scheduling and Filling of Vacancies

These issues involve proposed changes in section 28 of the agreement. The Board requested the parties to negotiate upon them and they have reached agreement thereon except on the request of the company for some flexibility in the use of copilots during their first 2 years of service to obtain proper evaluation of probationary employees, to obtain some fair amount of utilization of their services and to see that they obtain the necessary variety of experience during such 2 years. The association has not disputed the existence of the problems. Upon consideration of the whole matter, we have decided to recommend that the company withdraw its related request for an extension of the probationary period, and shall include a recommendation for revision of section 28–I–1 to meet those problems.

Check Pilot Flying

In connection with its proposal to add section 13–D, which we have recommended be withdrawn, the Association has requested the elimination of section 23–E. Since the other proposal has been rejected and since the request for elimination of this provision is based upon the contention that the proposed 13–D would govern the subject, it follows that this proposal must also be withdrawn.

RECOMMENDATIONS

We recommend—

As to the crew complement issue

1. That the carrier in the exercise of its management responsibilities modify the qualifications for the position of flight engineers in the following respects:

a. That flight engineers who will serve on piston and turboprop equipment be permitted to do so without having pilot qualifications.

b. That flight engineers who will serve on turbojet equipment be required to have pilot qualifications to the extent of a commercial license and instrument rating and the ability to fly and land the airplanes in case of emergency.

2. That assignments to flight engineer jobs be made from the flight engineers' seniority list in accordance with the applicable contract provisions, subject to the ability of the individual to meet the required qualifications.

3. That flight engineers who elect to take pilot training be placed on the pilots' seniority list in accordance with the applicable provisions of the pilots' agreement and that they remain nevertheless on the flight engineers' seniority list and continue to accrue seniority thereon for a period sufficient to enable them to complete their pilot training and for a reasonable period thereafter in which to determine whether they desire to be pilots or return to the occupation of flight engineer.

4. That pilots who elect to take flight engineer training be placed on the flight engineers' seniority list in accordance with the applicable provisions of the flight engineers' agreement and that they remain nevertheless on the pilots' seniority list and continue to accrue seniority thereon for a period sufficient to enable them to complete their flight engineer training and for a reasonable period thereafter in which to determine whether they desire to be flight engineers or return to the occupation of pilot.

5. That flight engineers who desire to obtain basic pilot qualifications, either for advancement as pilots or to flight engineer positions on turbojet equipment, be permitted to do so at company expense but on their own time, and that, since Eastern Air Line's turbojet airplanes will not be received before the spring of 1960, they be permitted to elect to commence such training at any time up to January 1959.

6. That the flight engineers acting through the Flight Engineers International Association promptly enter into discussions with

the pilots acting through the Air Line Pilots Association for the purpose of agreeing on the accommodation of their respective contract seniority provisions to the recommendations herein made and of jointly approaching the carrier to work out the necessary revisions of their said agreements.

7. That the flight engineers' requests for stepping up the qualifications for their jobs, the agency shop, the check-off, for provisions requiring the use of flight engineers under circumstances in which they may not be required under present contract provisions, and any other requests inconsistent with the above recommendations, be withdrawn.

As to the economic issues

8. That the parties agree on the following pay components:

a. Base pay

Year	Per month	Year	Per month
1st	$400	6th	$310
2d	535	7th	330
3d	250	8th	350
4th	270	9th	370
5th	290		

b. Hourly pay

	Day per hour	Night per hour
Under 125 mph	$4.96	$7.44
125 utbni. 140 mph	5.16	7.74
140 utbni. 155 mph	5.36	8.04
155 utbni. 175 mph	5.56	8.34
175 utbni. 200 mph	5.76	8.64
200 utbni. 225 mph	5.96	8.94
225 utbni. 250 mph	6.16	9.24
250 utbni. 275 mph	6.36	9.54
275 utbni. 300 mph	6.56	9.84
300 mph and over	6.76	10.14

c. Mileage pay

Miles	Cents
0–17,000	1.5
17,000–22,000	2.0
Over 22,000	3.0

d. Pegged speeds

The pegged speeds in the present agreement shall be modified as follows:

	Mph mileage speed
M–404	240
CV–340 and 440	240
DC–7B and 7C	330
Lockheed Electra	370
DC–8	470

e. Gross weight pay

2 cents for each hour flown per 1,000 pounds to 150,000 pounds maximum gross weight.

1 cent for each hour flown per 1,000 pounds in excess of 150,000 pounds maximum gross weight.

f. Copilot percentages of first pilot's flight pay

Year	Percent	Year	Percent
3d	47	7th	50
4th	47	8th	51
5th	48	9th	52
6th	49		

9. That the rate be $2.50 for each hour flown for first pilots in the company's foreign and overseas operation and that the corresponding rates for copilots be $1.30, and that the Association's request for an increase in the rate for offshore flying be withdrawn.

10. That the present provision for travel expenses be amended to provide that on trips with layovers of 10 hours or more pilots will be given, in addition to the present expense allowance, the sum of $3, except on the foreign and overseas operation where the company furnishes hotel accommodations; also, that pilots assigned to training away from base be paid, in addition to the present allowance, the sum of $3 for each 24 hours unless the company provides sleeping accommodations.

11. That when a pilot is on authorized leave-of-absence or off-pay status his base pay shall be prorated except that he shall be credited with one day of availability for each 2.7 flight-hours performed in that month.

12. That reference to a DC–3 minimum be eliminated from the reserve pilot guarantee, the examples be revised to reflect that change and the changes in pay scale, and the proposal to increase that guarantee be withdrawn.

13. That the word "major" be eliminated from section 10–B.

As to the retirement plan issue

14. That the carrier modify its existing retirement program in the following respects:

a. By adding a variable annuity (B fund) plan similar in general to such plans now in effect for pilots on domestic trunk airlines.

b. By providing for contributions to this fund by the carrier of 3½ percent and by the employees of 2½ percent of annual earnings.

c. By providing for vesting upon physical disability of the employee to serve in his current capacity.

d. By affording employees the option of making larger contributions to the B fund, at stipulated times and in stipulated amounts.

As to the miscellaneous issues

15. That the proposals for modification of section 13 be withdrawn, except that paragraph C shall be amended so that a pilot who is called thereunder and released from duty before starting another assignment shall receive not less than 1 hour of flying pay whether or not the flight operates.

16. That the present provisions of Section 17 be revised to provide:

a. That when there are scheduled and actual duty hours in any day in excess of eight, such excess hours shall provide the pilot with a minimum of flight-hours based on the ratio of 1 hour of flight time to each two and one-half hours of on-duty time, prorated.

b. That a pilot who is scheduled and actually is away from base should be given a minimum number of flight-hours, based on the ratio of 1 hour of flying for each 4 hours away from base, prorated.

c. That the above shall not be cumulative, but the one resulting in the greater number of flight-hours shall govern.

d. That pay-hours shall serve also for flight time limitations.

17. That in other respects the provisions of section 17 shall remain unchanged.

18. That the pilots' requests for trip-hours and tour-duty-hours flight time credits be withdrawn.

19. That the proposal of the company to increase the probationary period be withdrawn.

20. That the proposal of the pilots to eliminate section 23–E be withdrawn.

21. That section 28–I–1 be revised to read as follows:

"All flying assignments will be made in accordance with section 18 and the stated preference of the bidding pilots assigned to the base, except that the company need not honor the preferences of a copilot in assigning him to flying during his probationary period. During his second year the company may remove a copilot from his bid flying assignment temporarily and may assign a first year copilot, or a second year copilot who has not been awarded a bid to such flying vacancy."

22. That the parties conclude an agreement to be effective on the first day of the month following its execution, except that revised working conditions shall become effective within a reasonable time, and to expire April 1, 1960.

23. That retroactive pay be granted in an amount equal to 7 percent of each pilot's earnings between June 1, 1957, and the effective date of the agreement.

24. That the company send a copy of this report to each pilot in its employ.

Respectfully submitted.

DAVID L. COLE, *Chairman.*
SAUL WALLEN, *Member.*
DUDLEY E. WHITING, *Member.*

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