Report

TO

THE PRESIDENT

BY THE

EMERGENCY BOARD

CREATED JULY 9, 1952, BY EXECUTIVE ORDER 10371 PURSUANT TO SECTION 10 OF THE RAILWAY LABOR ACT

To investigate an unadjusted dispute between Trans World Airlines, Inc., and certain of its employees represented by Flight Engineers' International Association, TWA Chapter

(NMB No. 3968)

WASHINGTON, D. C.
AUGUST 29, 1952

(No. 101)

LETTER OF TRANSMITTAL

WASHINGTON, D. C., *August 29, 1952.*

THE PRESIDENT,

The White House.

MR. PRESIDENT: The Emergency Board created by you on July 9, 1952, under Executive Order 10371, pursuant to Section 10 of the Railway Labor Act, to investigate an unadjusted dispute between Trans World Airlines, Inc., and certain employees represented by Flight Engineers International Association, TWA Chapter, has the honor to submit herewith the report of the investigation, including its findings and recommendations.

Respectfully submitted.

ADOLPH E. WENKE, *Chairman.*
ROBERT O. BOYD, *Member.*
I. L. SHARFMAN, *Member.*

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I. Introduction

This Board, designated by the National Mediation Board as Emergency Board No. 101, was created July 9, 1952, by the following Executive order of the President:

> Whereas a dispute exists between the Trans World Airlines, Inc., a carrier, and certain of its employees represented by the Flight Engineers' International Association, TWA Chapter, a labor organization; and
>
> Whereas, this dispute has not heretofore been adjusted under the provisions of the Railway Labor Act, as amended; and
>
> Whereas this dispute, in the judgment of the National Mediation Board, threatens substantially to interrupt interstate commerce to a degree such as to deprive a section of the country of essential transportation service:
>
> Now, therefore, by virtue of the authority vested in me by Section 10 of the Railway Labor Act, as amended (45 U. S. C. 160), I hereby create a board of three members, to be appointed by me, to investigate the said dispute. No member of the said board shall be peculiarily or otherwise interested in any organization of employees or any carrier.
>
> The Board shall report its findings to the President with respect to the said dispute within thirty days from the date of this order.
>
> As provided by Section 10 of the Railway Labor Act, as amended, from this date and for thirty days after the board has made its report to the President, no change, except by agreement, shall be made by the Trans World Airlines, Inc., or its employees in the conditions out of which the said dispute arose.
>
> In performing its functions under this order the Board shall comply with the requirements of Section 502 of the Defense Production Act of 1950 as amended.

In due course the President appointed the following as members of the Board: Judge Adolph E. Wenke of Lincoln, Nebr., Mr. Robert O. Boyd of Portland, Oreg., and Prof. I. L. Sharfman of Ann Arbor, Mich. The Board first met in room 302, Federal Office Building, Kansas City, Mo., July 15, 1952. It elected Judge Wenke as chairman and approved the appointment of Johnston & King of Washington, D. C., as official reporters of the proceedings. All public hearings

City.

Appearances were entered by the parties as follows: For the Carrier, George A. Spater and A. Betty Kranzer, both of New York, and J. O. Jarrard of Kansas City; for the employees, Winfield M. Homer of Washington, D. C., Ernest H. Glaeser of Parkville, Mo., H. S. Dietrich of Mission, Kans., William Doty of Prairie Village, Kans., J. H. Malone of Kansas City, Mo., and William D. Kent of Searington, N. Y.

The hearings extended from July 15, to July 30, inclusive, and full opportunity was accorded to the parties freely to submit all testimony and argument which they deemed relevant to the dispute. In addition, the Board observed some of the planes involved in the proceeding on the ground and in flight—on the ground, an L–749A, and in flight, an L–749 and a Martin 404. Representatives of both the Carrier and the Union accompanied the Board and explained very helpfully the operation of the planes, the nature of the cockpit panels, and the functions in relation thereto of captains and co-pilots as well as of flight engineers.

The record of the proceeding consists of 1,746 pages of testimony and argument and includes 182 exhibits. The entire transcript and all the exhibits are submitted herewith as part of this report, and the findings and recommendations of the Board are based upon the complete record and not merely upon such data as may be set forth in the report.

Upon conclusion of the hearings the Board made an earnest effort to adjust the dispute by bringing the parties to agreement, but its mediatory services proved unavailing. Before the hearings were closed the parties agreed to an extension to September 7 of the original time limit for the submission of the report of this Board, and in due course the President approved this extension of time.

II. Development of Dispute

The parties to this dipsute are Trans World Airlines, Inc., and Flight Engineers International Association, TWA Chapter. The current agreement between the parties, which was executed July 18, 1950, and became effective as of July 7, 1950, was modified as to wage scales by a supplemental agreement dated October 26, 1950, under which the new wage rates were to become effective as of May 1, 1950; and the entire agreement, including the new wage rates, was to remain in full force and effect until April 30, 1952. It was further stipulated that unless written notice of intended change is served by either party

renew itself without change for each succeeding year thereafter.

On March 28, 1952, the Union served notice upon the Carrier of its desire to negotiate changes in the agreement, and on May 1 it submitted its proposed contract changes. Similarly, on April 1 the Carrier served notice upon the Union of its desire to negotiate changes in the agreement, and on May 1 it submitted its proposed contract changes. On May 22, 3 weeks later, the Union terminated direct negotiations because of their alleged futility. On May 26, the Carrier invoked the services of the National Mediation Board. Board member Thad Scott and Secretary E. C. Thompson handled the dispute in mediation, but without composing the differences between the parties. On June 6 the Board declared that its mediators had used their best efforts to bring about an amicable settlement through mediation but had been unsuccessful; and that it therefore requested and urged the parties to enter into an agreement to submit the controversy to arbitration. On the same day the Union rejected the proffer of arbitration; whereupon the Board immediately notified the parties that all practical methods for its adjustment of the dispute had been exhausted without effecting a settlement, and that in these circumstances its services were then terminated. On June 27 the Union advised the National Mediation Board that should strike action become necessary it would notify the Board at least 72 hours prior to taking such action; and on July 3, in conformity with this undertaking, the Union notified the Board that a strike of all flight engineers employed by TWA was being called, effective on or after July 10, 1952. It was in the face of this threatened interruption of interstate commerce that the Emergency Board was created by the Executive order of the President previously set forth.

As disclosed by the proposals for contract changes of both the Union and the Carrier, a considerable number of matters are at issue between the parties in connection with the revision of the current agreement. At the first session of this proceeding, however, the parties stipulated that they would limit their presentation to the basic wage issue as the sole matter here in dispute, and they requested the Board to confine its recommendations to the basic wage issue, but including the clearly related matters of retroactivity and duration of the recommended wage settlement. The proceeding was conducted on this basis, and the report will be developed in conformity therewith.

III. TWA Operations and Flight Engineers

Since a sound determination of the wage issue involved in this proceeding must necessarily be based upon an evaluation of the services of flight engineers, as related to TWA operations, a brief indica-

tion of the nature of these operations and of the functions of flight engineers will provide a helpful preliminary to the consideration of the Union and Carrier wage proposals.

TWA is engaged in both Domestic and International operations. Its Domestic routes span the entire country, from east to west; its International routes, first established in February 1946, extend from the United States to various points in Europe, Africa, and Asia.

In its Domestic service it operates a considerable variety of aircraft types: 37 DC–3's; 12 Martin 202–A's; 25 Martin 404's; 5 DC–4's; and three types of Constellations—32 L–049's, 12 L–749's, and 3 L–1049's (these 1049's being on order, to be delivered in 1952). In its International service, it operates only the Constellation type of aircraft—25 L–749A's.

The maximum certified gross weight of all the types of aircraft other than Constellations range from 25,200 pounds for DC–3's to 71,800 pounds for DC–4's, with the Martins 43,000 and 43,650 respectively; the maximum certified gross weight is 96,000 for the L–049's, 102,000 for the L–749's, 107,000 for the L–749A's, and 120,000 for the L–1049's (which are still on order).

Only the Constellations are operated by TWA with flight engineers. In the Domestic service, each such plane has a crew complement of two pilots (a captain and a copilot) and one flight engineer, together with one or two cabin attendants; in the International service, the crew consists of three pilots and two flight engineers (the extra pilot and flight engineer being carried for purposes of relief), together with two cabin attendants, a radio operator, and a navigator. Since December 1, 1948 (the firm compliance date) the Civil Aeronautics Board has required that flight engineers be used on all aircraft certificated for more than 80,000 pounds maximum take-off weight; but TWA has used flight engineers since 1940. For the year ended June 30, 1952, the miles flown by TWA with flight engineers constituted 55 percent of the Domestic miles flown, 99.8 percent of the International miles flown, and 64.4 percent of the total number of miles flown (43,446,969 out of 67,435,165). On July 1, 1952, TWA employed 184 flight engineers in the Domestic service and 138 in the International service—a total of 322 flight engineers.

Great emphasis was placed by both parties upon the nature of the flight engineer's job. The Board was guided, with the aid of expert witnesses, through the many aspects of the preflight check for which the flight engineer is responsible; through the arrangement of the many instruments and indicators of the cockpit, with special reference to the flight engineer's panels; through the many items of the check list in which the flight engineer participates with the captain and copilot—before and on take-off, in flight, and on and after landing;

through the flight engineer's duties in emergency situations. No useful purpose would be served by an attempt to survey the large mass of technical evidence of this character presented in this proceeding. It is obvious that the flight engineer must possess a thorough understanding of the aircraft, so that he may readily detect and diagnose malfunctioning; that he is charged with the removal of difficulties in flight where feasible, and with guiding the maintenance department with the scheduling of repairs and adjustments; that at the pilot's direction he operates the power plant for flying and maintains the plane's utility services while in flight. There can be no question that the flight engineer performs very important services. This was not only repeatedly asserted by the Union but readily conceded by the Carrier. These services, in flight, aside from involving the monitoring of numerous indicators to discover evidences of malfunctioning, are chiefly related to handling the power plant of the aircraft in such fashion as to carry out as efficiently as possible the expressed needs of the pilot in flying the plane—through regulating the throttles, adjusting the mixtures, and maintaining the fuel loads in balance; and in operating the various auxiliary systems—such as the hydraulic system, the pressurizing system, the heating and refrigerating system, the electrical system—which contribute to the comfort and safety of the passengers.

But virtually the entire complex of duties performed by flight engineers on the Constellations, both preflight and in flight, are performed by the pilots on the other types of aircraft operated by TWA. This was strikingly illustrated in this proceeding by a comparison of the instruments and controls on L–749's handled by flight engineers with the same instruments and controls on Martin 404's handled by captains and copilots. The use of flight engineers has been introduced, and required in certain circumstances, not because of the ability of flight engineers to provide a distinctive type of competence which pilots do not possess and to participate thereby in the piloting of the plane, but rather to relieve the pilots in large four-engine aircraft of certain duties related to the power plant and its auxiliary systems so that, because of less distraction, the pilots may perform their flying duties more safely and effectively. This position was expressly recognized by the Civil Aeronautics Board as late as April 14, 1948. On October 6, 7, and 8, 1947, the Board conducted a public hearing "on the question of whether, and under what circumstances and conditions, if any, additional flight crew complement should be required on air carrier aircraft." With respect to flight engineers, the Board declared in its report: "In the hearing above referred to extensive testimony was presented to the Board with respect to the

desirability of a flight engineer on various aircraft. * * * As a result of this testimony the Board has concluded that the multiplicity of instrumentation and complexity of operational controls on certain of these aircraft limit the pilot's ability to focus his attention on all of the critical instruments and controls. It is believed that a competent flight engineer, by assuming certain mechanical duties, will enable the pilot to concentrate his attention on the actual flight of the aircraft, radio operation, and receipt of traffic control clearances particularly during instrument conditions where this is imperative."

It is the judgment of this Emergency Board, that while the flight engineer is an important third member of the cockpit crew, to the extent that he relieves the pilots of certain duties, his services must be sharply differentiated from those of the pilots, who are solely responsible for actually flying the aircraft; and that an evaluation of the services of flight engineers for the purpose of adjusting wage scales should constitute an appraisal largely independent of the evaluation of the services of pilots reflected in their wage scales.

IV. Union and Carrier Wage Proposals

Before we set forth the essential elements of the wage proposals of the Union and the Carrier, it will be helpful if we trace briefly the development of the TWA pay scales for flight engineers. These data, culminating in the scales currently operative, will provide a necessary background for examining the nature of the wage proposals.

1. DEVELOPMENT OF TWA PAY SCALES

The original flight engineer scale was based on the pay of mechanics. The first group of TWA flight engineers for whom records are available—17 in number—had been mechanics, with one exception (a mechanical inspector); and their monthly pay after being transferred to the position of flight engineer was uniformly set at $200, in place of a monthly pay before transfer (computed from hourly rates) ranging between $162.24 and $219.88, with two of the men actually taking a reduction in pay. This was the May 1, 1940, scale. It ranged from a minimum of $200 in the first 6-months period to a maximum of $285 in the seventh 6-months period. On September 1, 1941 (a year and 4 months later) the minimum was increased to $215 and the maximum to $300—an across-the-board increase of $15. During its War Contract Service, beginning in 1942, TWA paid a monthly rate of $500 to flight engineers—the top commercial rate of $300 as established in 1941, plus a war risk bonus of $200—this $500 rate receiving the approval of the Army Air Force. The first TWA postwar contract for the flight engineers was negotiated with the Airline Mechanics Asso-

ciation on October 1, 1945. It established a rate of pay ranging from $275 to $350 for eleven 6-months periods. Even this scale did not depart sharply from that applicable to master mechanics. All of the above pay scales (except under the War Contract Service) were for Domestic routes, and they were used exclusively on the Boeing 307 equipment—the so-called Stratoliners—which were acquired in 1940, transferred to the Government in 1942, and reacquired in 1945.

We will now set forth without comment, in tabular form, for both Domestic and International, the pay scales for TWA flight engineers as they have developed in the course of six collective bargaining agreements with the existing organization, representing the flight engineers as career employees operating in the cockpit of the large four-engine aircraft. Between 1946 and 1950, inclusive, the Domestic scale covered both Stratoliners and Constellations, with differentiated rates; but since the Stratoliners were retired during 1950, shortly after the consummation on October 16 of the latest wage adjustment, the tables will present only the Constellation rates. The dates used in these tables are the effective dates of the agreements, and thus indicate the periods during which the respective pay scales were operative:

Domestic

Effective date	Jan. 1, 1946	July 1, 1946	Apr. 1, 1947	Apr. 1, 1948	May 1, 1949	May 1, 1950
First 6 months	$350	$375	$400	$420	$420	$420
Second 6 months	375	400	425	445	445	445
Third 6 months	400	425	450	470	470	470
Fourth 6 months	400	450	475	495	495	495
Fifth 6 months	425	475	500	515	515	520
Sixth 6 months	425	500	525	535	535	545
Seventh 6 months	450	----------	525	545	545	565
Eighth 6 months	----------	----------	540	555	555	585
Ninth 6 months	----------	----------	----------	565	565	595
Tenth 6 months	----------	----------	----------	----------	575	605
Eleventh 6 months	----------	----------	----------	----------	585	625

International

Effective date	Jan. 1, 1946	July 1, 1946	Apr. 1, 1947	Apr. 1, 1948	May 1, 1949	May 1, 1950
First 6 months	$375	$400	$425	$445	$445	$475
Second 6 months	375	425	450	470	470	500
Third 6 months	400	450	475	495	495	525
Fourth 6 months	400	475	500	520	520	550
Fifth 6 months	425	500	525	545	545	575
Sixth 6 months	425	525	550	570	570	600
Seventh 6 months	450	550	575	590	590	625
Eighth 6 months	450	560	600	615	615	650
Ninth 6 months	475	----------	----------	625	625	670
Tenth 6 months	475	----------	----------	----------	650	685
Eleventh 6 months	500	----------	----------	----------	660	700
Overtime	----------	----------	----------	[1]	[2]	[3]

[1] 1/85 of base pay per hour over 255 hours a quarter.
[2] 1/57 of base pay per hour over 255 hours a quarter.
[3] 1/57 of base pay per hour over 255 hours a quarter.

It may be added that, as of July 1, 1952, the average actual monthly pay of TWA flight engineers was $558.33 in Domestic service and $657.46 in International service. The average actual monthly earnings of all of the 322 flight engineers was $593.12.

2. UNION WAGE PROPOSALS

It is in relation to the current pay scales indicated above—operative since May 1, 1950—that the Union's wage proposals must be considered.

These proposals, when confined as stipulated by the parties to the basic issue of the structure and amount of the wages to be paid to flight engineers, can be stated at this point in summary fashion as follows:

(*a*) That employees in training as student flight engineers be paid at the rate of $350 per month (instead of $300 provided in present contract).

(*b*) That the following schedule of base pay be established for flight engineers:

First 6 months	$620
Second 6 months	640
Third 6 months	660
Fourth 6 months	680
Fifth 6 months	700
Sixth 6 months	720
Seventh 6 months	740
Eighth 6 months	760
Ninth 6 months	780
Tenth 6 months	800
Eleventh 6 months	820

(*c*) That in addition to the above scale, flight engineers on L–049 equipment be paid at the rate of $1.50 per hour for all hours flown, and those on L–749 or L–749A equipment at the rate of $2 per hour for all hours flown.

(*d*) That in addition to all other stipulated rates of compensation, flight engineers be paid equipment qualification compensation of $30 per month for each model of Douglas DC–4 and Lockheed 049, 749, and 749A aircraft upon which they are qualified to operate, in addition to one model for which the base pay shall be considered compensation.

(*e*) That in addition to all other stipulated rates of compensation, flight engineers be paid $2 per hour for night flying.

(*f*) That in addition to all other stipulated rates of compensation, flight engineers be paid at the rate of $20 per hour for all flight and/or credited time over 70 hours per calendar month.

(*g*) That in addition to all other stipulated rates of compensation, flight engineers assigned to the International service be paid $150 per month.

3. INFLUENCE OF AMERICAN AIRLINES INVESTIGATION

It is apparent, from a mere statement of the above proposals: First, that the Union sought to substitute an incentive or incremental system of pay for the prevailing flat pay scale; and, second that it sought to obtain thereby extraordinarily large increases in wage payments. It is the judgement of this Board that both of these objectives were influenced in controlling measure by the copilot wage changes that resulted from the recommendations of the so-called Cole emergency board (No. 94), submitted to the President on May 25, 1951, in the dispute between American Airlines and the Airline Pilots Association. The Cole Board, whose investigation extended for a period of about 4½ months, dealt with a considerable number of matters; but its findings and recommendations with respect to the pay of copilots possesses primary significance in connection with the instant proceeding (Cole Board Report, pp. 28–34, 52).

Traditionally copilots on various airlines had received a flat monthly rate of pay, increasing with seniority up to as high as 8 years of service. This scale not only provided less compensation than that generally stipulated in the flight engineers' flat scale, but involved markedly less compensation than that received by captains or first pilots, who were paid on an incentive scale. The scale for captains provided, in addition to a monthly base pay (also progressing up to 8 years of service), hourly pay (varying with the speed flown and with a 50-percent differential for night flying), mileage pay, and gross weight pay. The Cole Board sought to assimilate the status of the copilot to that of the captain. It recommended a very substantial increase in copilot pay—to a level measurably in excess of that of flight engineers. This was to be achieved by the elimination of the flat pay scale, except for the first 2 years, and the establishment, as in the case of captains, of the incentive basis of pay. For the first 2 years of their employment, when copilots "have not yet attained the status of practical interchangeability with first pilots which is the

mendations with regard to copilots' compensation," a flat rate of pay, at a higher level than that previously prevailing, was to be continued; but beginning with the third year, copilots were to be paid, in addition to a more modest base pay (as in the case of captains), hourly, mileage, and gross weight pay equal to 55 percent of that paid to captains—that is, "flight pay, including all the components or elements of flight pay paid to the first pilot, computed in the same manner, except that the copilots' flight pay shall be 55 percent that of the first pilot." Finally, it was also recommended that, "starting with the third year, copilots shall have a monthly guarantee of base pay plus 60 hours of flight pay on the type of equipment they are currently flying."

From the standpoint of the instant proceeding the reasons for these recommendations are fully as important as the recommendations themselves. The Board's findings that copilots have ceased to be apprentice flyers, that because of developments in the industry opportunities for attaining captaincies are severely limited, that after 2 years copilots become practically interchangeable with captains—these findings established beyond question that the Board sought to remove an inequity, in relation to flight engineers as well as captains, which was grounded in the nature of the work performed and emerged as a result of changed conditions. This reasoning was spelled out by the Board itself. After referring to the copilot as "the forgotten man" in the airline industry and declaring that these employees continue "to be regarded for pay purposes as in the nature of apprentices" and that they have never been able, since the rendering of Decision 83 in 1934 by the National Labor Board, "to have their services properly evaluated in terms of pay," the Board said, among other things:

> Originally copilots were actually apprentice flyers. No flying background was required of them, and they performed a variety of inferior services, like serving meals, cleaning the cabin, and greasing and fueling the plane. Consequently, they were placed on a flat monthly salary, varying only with their length of service. In the course of time, however, they have become a carefully selected, highly trained group, competent in all respects to do the work of captains, and in fact at various times in the past copilots with 1½ to 2 years of experience have become captains. Now by force of the seniority provisions of the contract, the return from military work of senior pilots, and the 1946–48 let-down in business, together with the temporary influence of the new equipment of the company, copilots with as much as 8 years of experience are still flying as copilots. After copilots have acquired about 2 years of experience their work becomes practically interchangeable with that of the captain, except that the final responsibility remains with the captain. * * *
>
> The inequity of the copilots' pay is reflected by reference to the pay of the captains and also to the flight engineers who work alongside them in the DC–6

maximum of $560 after 4 years as compared with the copilots' $290 to $580, with the top being reached after 6 years. * * *

Not only do we find that the copilots are entitled to higher earnings more in keeping with their relative value in the cockpit vis à vis the first pilots and the flight engineers, but we also find that their work and position entitle them to the same type of incentive pay which the first pilots have.

Along with other airlines, TWA followed in principle the recommendations of the Cole Board in negotiations with its pilots. In practice, however, it modified both the base pay and the flight pay as recommended by the Board for copilots. The agreement signed October 11, 1951, issued in the following: It accepted the flat rates of $350 and $400 per month recommended for the first 2 years; it established a base pay ranging from $216.66 to $300 for the third to the eighth year—corresponding to the base rates of captains for these years and constituting a slight increase over the recommended rates; and it provided for the computation of flight pay as 48 percent, instead of 55 percent, of the amount paid to captains, with a guarantee, as in the case of captains, equal to 60 hours of flying in addition to the base pay. This is the Domestic scale. The International scale continued to be stated largely in terms of flat rates, as derived from the Domestic rates of pay. Accordingly, it provided rates for copilots of $410 and $460 for the first 2 years; a base pay of $700 to $785 for the third to the eighth year; and $6.90 per hour, beginning with the third year, for hours in excess of 70 hours per month—which is 48 percent of the captain's rate ($14.35) in the circumstances.

In the opinion of this Board, it is the incentive system of pay thus established for copilots, producing new wage scales which exceeded substantially the flat rates paid to flight engineers, that is largely responsible for both the incremental form of the Union's wage proposals and the very large pay increases they were designed to produce. The question of the soundness of this procedure and the justification of the wage proposals will be considered after the Carrier's counter proposals, together with the influence exerted upon them by the Eastern Airlines arbitration, have been briefly stated.

4. CARRIER WAGE PROPOSALS

The counterproposals offered by the Carrier diverged sharply from those submitted by the Union. While TWA proposed an incentive system of pay, it adhered to the traditional pattern specified in the pilots' agreements, instead of including the various elements embraced in the Union's proposals; and the resulting scales of pay, as computed by the Carrier, were strikingly low when compared with the strikingly high scales proposed by the Union.

The TWA proposal involved, as in the case of captains and copilots, both base pay and flight pay; and the flight pay provided, as additions to the base scale, hourly pay (differentiated as between day and night flying), mileage pay, and gross weight pay. The scale for flight engineers was extended to 8 years—as in the case of captains and copilots. For the first 2 years, as in the case of copilots, they were to receive flat monthly rates of pay—$430 for the first year and $485 for the second year, which was the equivalent on average to the present flight engineer scale for the first 2 years, but somewhat higher than the corresponding rates of the copilots. For the third to the eighth year, the base scale ranged from $216.66 to $300, to correspond precisely to the base scale of captains and copilots for these years. As increments to this scale, there was to be added hourly pay averaging $2.65 per hour ($2.12 for day flying and $3.18 for night flying), mileage pay of one-half cent per mile, and gross weight pay of one-half cent per 1,000 pounds per hour. This flight pay was 36 percent of the flight pay of captains, as compared with 48 percent in the case of copilots.

The computation of pay for the eighth year—the highest rate provided for—would consist of the following items for 80 hours of flying, half day and half night, on the TWA Constellation L–749; base pay, $300; hourly pay, $212 (80×$2.65); mileage pay $100 (80×250×$0.005); gross weight pay, $40.80 (102×$0.005×80). This would produce a top rate of $652.80 in the eighth year, as compared with a present rate of $625 attained in the sixth year. The same method of computation would apply to all the steps in the progression, beginning with the third year. The resulting scale is for Domestic service. The TWA proposal did not include any provision for change in the International scale.

For comparative purposes like computations were made by the Carrier under the Union's wage proposals. The highest rate of pay, in this instance, would be for the eleventh 6-month period. The computation would consist of the following items for 80 hours of flying, half day and half night, on the TWA Constellation L–749; base pay, $820; equipment differential, $160 ($2×80); equipment qualification, $90 ($30×3, assuming qualification also on L–049, L–749A, and L–1049); night flying, $80 ($2×40); additional compensation for hours in excess of 70, $200 ($20×10). This would produce a top rate of $1,350, as compared with a present rate of $625 at the same point in the progression. The same method of computation would apply to all the 11 steps included in the Union's proposal, beginning with the first 6-month period. The resulting scale is for Domestic service only. It will be recalled that under the Union's proposals flight

engineers were to receive $150 per month, in addition to all other stipulated rates of compensation, when assigned to the International service. The top rate would then become $1,500, instead of $1,350, and all the other steps in the International scale would be increased by the same amount.

It will be helpful at this point to present the results of these computations in tabular form. There follows, for flight engineers in both Domestic and International service, a tabulation of the present rates, together with the scales, as computed above proposed by the Carrier and the Union:

Time intervals	Domestic			International		
	Present rates	Carrier proposal	Union proposal	Present rates	Carrier proposal	Union proposal
First 6 months	$420	$430.00	$1,150	$475	$475	$1,300
Second 6 months	445	430.00	1,170	500	500	1,320
Third 6 months	470	485.00	1,190	525	525	1,340
Fourth 6 months	495	485.00	1,210	550	550	1,360
Fifth 6 months	520	569.46	1,230	575	575	1,380
Sixth 6 months	545	569.46	1,250	600	600	1,400
Seventh 6 months	565	586.13	1,270	625	625	1,420
Eighth 6 months	585	586.13	1,290	650	650	1,440
Ninth 6 months	595	602.80	1,310	670	670	1,460
Tenth 6 months	605	602.80	1,330	685	685	1,480
Eleventh 6 months	625	619.80	1,350	700	700	1,500
and/or						
Sixth year	----------	619.46	----------	----------	----------	----------
Seventh year	----------	636.13	----------	----------	----------	----------
Eighth year	----------	652.80	----------	----------	----------	----------

It need only be added that the TWA proposal also carried a guarantee, in addition to base pay, of 60 hours' flight pay, half day and half night, as in case of captains and copilots; and, further, the promised assurance that no flight engineer would be permitted to be subjected, as a result of the new incentive system, to a reduction in pay below the bracket applicable to him under the flat scale system, at the time the agreement is consummated.

5. INFLUENCE OF EASTERN AIRLINES ARBITRATION

The above wage proposals of the Carrier were at least as clearly influenced by the award in the Eastern Airlines arbitration as the Union's proposals had been by the copilot wage changes that followed the recommendations of the Cole Board in the American Airlines investigation. Indeed, TWA expressly presented its proposals in terms of the arbitration award, and it sought to support them, almost entirely, on the assumption that this award provided a generally applicable pattern for the adjustment of flight engineers' pay scales at this juncture.

flight engineers on Eastern Airlines, represented by the Fight Engineers International Association, EAL Chapter, sought "to have established for this craft or class of employees a basis of pay similar to that of the pilots and copilots throughout the industry * * * and a rate of pay that will justly and equitably compensate them for the service they perform." The Union's proposals had been made following the drastic change in copilot status that resulted from the recommendations of the Cole Board. Frank P. Douglass, who had been a member of the Cole Board, was the neutral arbitrator in this case; and the award, rendered April 15, 1952, is generally referred to as the Douglass Award. While the award, from which the employee representative dissented, has been attacked in the courts on technical grounds, and though upheld in the court of first instance is still in litigation on appeal, it is now in effect on Eastern Airlines. For our purposes, furthermore, the outcome of this litigation is immaterial, since we are concerned, not with the adjustment of flight engineer wages on Eastern, but solely with the relationship of the substantive provisions of the award to the Carrier's wage proposals in this proceeding.

There can be no question that the structure of the pay scale prescribed in the award established in every respect the guiding pattern for the TWA wage proposals. It extended the progression to 8 years; it provided a flat rate of pay for the first 2 years; it set a substantially lower base scale for the third to the eighth year; it supplemented the base pay with hourly pay, mileage pay, and gross weight pay; and it included a minimum monthly guarantee. But while TWA accepted this structure for the incentive system of pay involved in its proposals, it modified a number of the actual terms prescribed in the award. This was done, it would seem, partly to harmonize the pay scheme for flight engineers with that in effect for its captains and copilots, and partly to restrict the wage payments under the new arrangement to a level substantially the same as that established for Eastern by the arbitration award.

Thus, the flat rate of pay for the first 2 years was identical for the two carriers ($430 and $485), and so were the mileage rate (one-half cent per mile) and the rate for gross weight pay (one-half cent per 1,000 pounds per hour). On the other hand, the base scale, beginning with the third year, was lower in the TWA proposal (ranging from $216.66 to $300) than for Eastern (ranging from $235 to $330), but this was offset by a higher proposed hourly pay for TWA ($2.12 day and $3.18 night) than that prescribed for Eastern ($1.74 day and $2.61 night). The minimum monthly guarantee—which on Eastern

after—appears to have been dealt with more liberally in the TWA proposal (which, it will be recalled, provided for base pay, plus 60 hours of flight pay, plus no reduction in pay received at time of transition to the new system). Finally, the provision in the award for the payment, in addition to all other rates of compensation, of 45 cents per hour for all hours flown in Eastern's "Foreign and Overseas Operation" was entirely eliminated from the TWA proposal, on the ground that the TWA International scale is adequate without further increase.

In light of all these circumstances, we will now attempt to appraise the Union and Carrier wage proposals, and to indicate what in the judgment of the Board constitutes a sound and equitable settlement of the wage dispute.

V. Appraisal of Wage Proposals

The wage proposals for flight engineers under consideration by this Board bring to issue two basic questions: First, what shall be the structure of their wage payments; and second, what shall be the level of their wage payments. The first problem—on wage structure—involves a determination not only of whether the Union's or the Carrier's proposed system of wage-setting provides the sounder approach, but whether any incentive or incremental system is preferable for flight engineers to the flat monthly scales generally prevailing in the industry. The second problem—on wage level—involves a determination not only of the soundness of the wage proposals submitted by the parties, from the standpoint of the amount of pay they are calculated to produce as distinct from the method of its determination, but the extent to which and the basis upon which increases in the wages of flight engineers appear to be justified. The two problems, as presented to the Board, are very closely intertwined; but it will be helpful if we dispose of the question of the wage structure before we examine the problem of the flight engineer's level of wages.

1. THE STRUCTURE OF WAGE PAYMENTS

On the surface it appears that both parties are seeking to establish an incentive system of pay for flight engineers. Each proposal is couched in terms of incremental additions to base pay, apparently under the influence of the substitution, in the case of copilots, of the traditional incentive system applicable to captains for the flat scales that had been operative for copilots. But if an incentive system of pay were to be recommended by this Board, a choice would have to

be made between the Union and the Carrier proposals. They differ, not merely in the level of wages each is designed to achieve, but in the character of the elements to be utilized in the process of wage determination.

The Carrier's proposal, following the pattern prescribed in the Eastern Airlines arbitration, conforms to the system applicable to copilots. The Union, on the other hand, departed markedly, and rather strikingly, from that system. Summary reference to some of the departures, entirely apart from the magnitudes involved, will suffice for our purposes. The Union's proposals do not extend the wage progression to a period of 8 years; they do not establish a flat rate of pay for the first 2 years; they do not reduce base pay, when supplemented by flight pay, to modest levels; they provide for direct equipment charges, on a differentiated basis, which embrace all the types of equipment actually used for revenue purposes by this carrier; they contemplate equipment qualification compensation as an entirely new element in wage determination; they prescribe compensation for time in excess of 70 hours for Domestic as well as for International service; and despite the introduction of this novel factor in domestic wage determination, they widen extensively the usual differentials between the Domestic scale and the International scale. The adoption of such an incentive system, to parallel the traditional system as developed for captains and copilots, would be not only to burden the carriers unduly, but to court all sorts of unforeseen difficulties in maintaining fair and reasonably stable wage relationships in the cockpit. In these circumstances, this Board, if it found the establishment of an incentive system of pay for flight engineers to be necessary or desirable, would unequivocally recommend the adoption of the traditional system, as proposed by the Carrier.

In point of fact, however, the common desire of the parties to substitute an incentive system of pay for the existing flat scale is more apparent than real. It is clear, of course, that the Carrier rejected the Union's proposed system, and that the Union rejected the Carrier's proposed system. At no point in the proceeding did the Union submit any evidence whatever in support of its wage scheme as such; indeed, its representatives declined even to explain the philosophy of the proposal. As far as rationale is concerned, some of the included elements might have been omitted, or some new elements might have been included, or the relative quantitative importance of the various elements might have been altered, without changing in the least the degree of justification—or, more accurately, of the absence of justification—to be found in the record. The Board is convinced that the hybrid pattern of wage determination involved in the Union's pro-

posals was submitted merely as a convenient vehicle through which the desired large increases in wages could be produced—that raising the level of wage payments, rather than changing their structure, is the Union's primary concern and probably its sole objective. And the Board is constrained to reach a corresponding conclusion with respect to the Carrier's proposal of the incentive system of pay. At no point in the proceeding did the Carrier submit any evidence other than the fact of the Douglass Award in support of the incentive system as such—of the conversion, aside from the specified rates of pay, of the flight engineers' flat scales into incremental scales. Yet the Douglass Award only declares on this point: "The Board finds the request of the Association for the conversion from a monthly salary basis of pay to a formula patterned on the increments now contained in pilots' agreements to be reasonable and one that should be beneficial to both Eastern and its flight engineers."

However justified the request might have been in the case of Eastern, it is doubtful whether the award would have been so readily accepted as a pattern if the level of wage payments produced thereby had not been deemed by TWA to provide a basis for a reasonable settlement of the wage issue. In any event, practically all evidence and argument in this proceeding were directed to the terms of the award and the corresponding proposal, with special reference to the resulting scales; nothing was said concerning the proposed change of system as an end in itself. These circumstances support the conclusion that maintaining wage payments at what it considers to be a reasonable level, rather than changing their structure, is also the Carrier's chief concern and primary objective.

Aside from Capital Airlines (whose flight engineers are also qualified as copilots) and Eastern (as a result of the Douglass Award), all airlines, in both Domestic and International service, pay their flight engineers on a flat scale basis. This has been the established method of wage payment in the industry since flight engineers were first used by Pan American in 1937 and by TWA in 1940, and it continues to prevail as of today. Four air carriers (besides Eastern)—Chicago & Southern, Pan American, American, and Continental—have reached agreement on the wages of flight engineers since the Cole Board recommended adoption of the incentive system of pay for copilots. In each instance the flat pay scale was retained for flight engineers. An incentive system which is appropriate for pilots, who actually fly the planes and assume controlling responsibility for the efficiency of their use and for the safety of progressively more valuable equipment and increasing numbers of passengers, is not necessarily applicable to flight engineers, in light of the functions of their

job as described in an earlier section of this report. If there are valid reasons for the conversion from a flat scale to an incentive system, they have not been presented in this proceeding. In the judgment of the Board, the established flat scales should be retained by TWA, and that any change in the level of wages should be determined in relation to these flat scales.

2. THE LEVEL OF WAGE PAYMENTS

As in connection wtih the structure of wage payments, both the Union's and the Carrier's proposal, together with their supporting data, will be considered, but at this point solely from the standpoint of the level of wage payments.

In supporting its wage-increase demands, the Union placed special emphasis upon what is deemed to be the historic wage relationships between captains, copilots, and flight engineers. This was not an unnatural procedure, in view of the influence believed to have been exerted upon its wage proposals by the change in copilot status resulting from the recommendations of the Cole Board. It attacked the problem with reference to both the absolute and percentage increases received by each of the three flight crew members in the course of the development of their respective scales of pay; and it compared the percentage wage relationships that prevailed at each contract point between those crew members. The results, as was to have been expected, appeared to be adverse to the flight engineers, particularly as compared with copilots. In part these results can be explained by the fact that the current rate used for flight engineers was that established as of May 1, 1950, whereas the current rate for captains and copilots was that negotiated in October of 1951, a year after the earlier negotiation and a year and five months after the effective date of the rates established for flight engineers; and in part they can be explained by the belated enhancement, for the clearly adequate reasons previously set forth, of the wage recognition accorded to the copilots. The Carrier did not question the relevance of this type of evidence, but it took issue with many of the Union's comparisons, largely on grounds that appeared to be well-founded, submitting data of its own which reflected much less favorable past relationships between pilots and flight engineers, in the adjustment of wage scales, than those reflected in the data submitted by the Union.

But nothing would be gained by burdening this report with explanations of the many variations in assumptions used by the two parties which led to such wide variations in statistical results. A careful study of the entire record, embracing the data submitted by both parties, supports the conclusion that the alleged pattern of his-

torical wage relationships is not a fixed pattern at all—that these relationships differ widely as between different stages in the wage progression, as between different contract negotiations, and as between different air carriers. Whatever the percentages shown, they are the arithmetic results of diverse wage scales negotiated or determined for the most part independently of one another but used by the parties for comparative purposes, rather than ratios deliberately approximated as goals deemed essential to the maintenance of proper wage relationships.

No substantial evidence of convincing character was presented in this proceeding that any definite relationship between the scales of pilots and flight engineers has constituted a controlling or even a guiding factor in the wage determinations for flight engineers. It is true that in the Eastern Airlines arbitration the following appears: "The formula set out in the award maintains the historic differential in pay between flight engineers and captains, and contemplates the increase in rates of pay granted captains in 1951." But it is evidence of the elusiveness of the concept of historical differentials in this sphere, that the Union, in the instant proceeding as well as in the arbitration case, repudiated this pronouncement vigorously and in its entirety; and of course there was deliberate failure to restore the wage relationship between flight engineers and copilots which antedated the wage increase for copilots that followed the recommendations of the Cole Board.

As a matter of fact, the Union's wage proposals may be said in themselves to constitute a repudiation of the doctrine that the maintenance of the so-called historical differentials between pilots and flight engineers should operate as a controlling factor in this wage determination. The Union's proposed base pay for Domestic service, ranging from $620 to $820, involves an increase of almost 50 percent at the bottom of the scale and an increase of more than 30 percent at the top of the scale; the base pay for International service, ranging from $770 to $970, involves corresponding increases of more than 60 percent and almost 40 percent; the complete Domestic scale, ranging from $1,150 to $1,350, and the complete International scale, ranging from $1,300 to $1,500, involve such increases of approximately 175 and 115 percent. These proposed wage advances are obviously not designed merely to restore historical relationships. This appears strikingly from the Union's own computations, although these computations do not give full effect to all the potential increases under its proposals. Its exhibits show that in the Domestic service the present top rate of flight engineers constitutes 49.1 and 46.8 percent of the top rate of captains, at 80 and 85 hours, and 81.4 and 78.4 percent of

the top rate of copilots, at 80 and 85 hours; and that the proposed rate would bring the percentages, under the same circumstances, to 98 and 102 percent of that for captains, and to 162.8 and 171 percent of that for copilots. This is the startling result despite the fact that $1,250 was used as the proposed top rate for flight engineers at 80 hours, instead of the at least equally appropriate rate of $1,350. Similarly, the Union's exhibits show that in the International service the present top rate of flight engineers constitutes 48.3 and 45.9 percent of the top rate of captains, at 80 and 85 hours; and that the proposed rate would bring these percentages, under the same circumstances, to 99.4 and 102.3 percent of that for captains, and to 168.5 and 175 percent of that for copilots. This is the startling result despite the fact that $1,440 was used as the proposed top rate for flight engineers at 80 hours, instead of the at least equally appropriate rate of $1,500. Proposed wage adjustments of this order of magnitude necessarily involve, not only a determination to regain the ground alleged to have been lost by the 1951 recasting of the copilots' pattern and level of wages, but a radical reevaluation of the job of the flight engineer.

In view of the sharp differences between the functions of pilots and flight engineers, coupled with the controlling circumstances responsible for the change in copilot status, as both are set forth in earlier sections of this report, it must be clear that while copilots received recognition in 1951 that had been long overdue, the flight engineers lost no ground whatever merely because of the resulting alteration in wage relationships. This aspect of the problem requires no further elaboration. The Union's proposals must be assumed to be grounded in its own subjective evaluation of the flight engineer's duties and responsibilities. The Board's analysis of the functions of flight engineers lends no support whatever to any such evaluation. But it is unnecessary to rely upon subjective judgments. The most valid and realistic general evaluation, aside from relatively minor differences on different properties because of more or less distinctive circumstances, is to be found in the prevailing wage scales on TWA and other airlines as they have developed by slow stages since flight engineers were first used. These scales are the resultant of numerous adjustments, achieved in the course of a considerable period of years, involving ex parte company actions, collective bargaining negotiations, mediation proceedings, fact-finding investigations, binding arbitration settlements. In the absence of any major recent change in the duties and responsibilities of flight engineers—and no hint even of any such change was disclosed in this proceeding—the pay scales operative in the industry as a whole provide the soundest and most acceptable evaluation that is available.

The following table presents the minimum, maximum, and average rates of pay, Domestic and International, for all the leading airlines in the United States (exclusive of Braniff, Capital, and Delta, who use flight engineers who are also qualified as pilots), as they appear in the present-pay scales of flight engineers.

	Domestic			International		
	Minimum	Maximum	Average	Minimum	Maximum	Average
TWA	$420	$625	$533.64			
AAL	400	620	511.50			
CAL	430	630	530.00			
C&S	440	605	525.00			
EAL	430	646.80	573.22			
NAL	390	550	470.00			
NWA	420	600	513.00			
UAL	420	600	510.00			
TWA				$475	$700	$595.91
NWA				475	650	562.50
PAA				535	735	635.00
UAL				525	725	625.00

The most striking characteristic of the above table is to be found, not in the differences disclosed between the various airlines, but rather in the general agreement upon the evaluation of the flight engineer's job as translated into pay scales. There are, of course, a few depressed rates which can be explained only by a more thorough examination of the circumstances of the particular carrier or the labor organization with which it deals than was available in this proceeding; and since the various chapters of even the FEIA are autonomous, more or less minor differences are bound to persist throughout. But most of the substantial variations can be readily explained by the fact that some of these rates are old rates, now in process of renegotiation, while others have been established much more recently. Thus, whereas the TWA rates date from May 1, 1950, those of Northwest from August 1, 1950, those of United from February 1, 1951, and those of National from May 10, 1951—with the contracts in all these instances being now in dispute—the rates for Pan American date from August 1, 1951, and will not be reopened until December 31, 1952; those for American date from October 16, 1951, and will not be reopened until February 1, 1953; those for Chicago & Southern date from January 1, 1952, and will not be reopened until March 1, 1953; those for Eastern were fixed on May 15, 1952, but date from November 1, 1951, and will not be reopened until December 1, 1952; and those for Continental date from June 16, 1952, and will not be reopened until June 16, 1953.

A mere glance at the table will indicate that on the whole the TWA rates are favorably related to the rates of the other airlines, particu-

4 months old, embracing an emergency period of rising prices incident to war and rearmament. One exception to TWA's favorable wage position is to be found in the figures for Pan American, in the International field. In this instance the figures in the table are not those submitted by the Carrier. TWA's figures for Pan American show a minimum of $435, a maximum of $735, and an average of $581.43. The minimum figure represents the initial bracket for assistance flight engineers, the maximum figure the top bracket for flight engineers, and the average is the sum of both the assistant flight engineer's scale (5 brackets) and the flight engineer's scale (9 brackets), divided by 14. This procedure was followed because of the inclusion of an assistant flight engineer's scale in the Pan American agreement and the provision that only after serving as an assistant flight engineer for 4 years may the employee be promoted to the position of flight engineer, provided an opening is available, at which time he is entitled to start in the second bracket of the flight engineer's scale (the first bracket being the same as the final bracket of the assistant flight engineer's scale). Since Pan American operates with one assistant flight engineer and one flight engineer, whereas TWA operates with two flight engineers, in their competitive service, the Carrier felt justified in following this procedure, whereby TWA's 11 brackets would be compared with Pan American's 14 brackets, to the advantage of TWA on the average and in all but the twelfth, thirteenth, and fourteenth steps in the wage progression.

Since, furthermore, Pan American operates Stratocruisers (Boeing 377's) as well as Constellations, whereas TWA operates only Constellations, TWA noted, but properly did not include in its computations, the addition to the base scales of Pan American's assistant flight engineers of 75 cents per hour for all hours of flight in excess of 40 hours in any month in the Stratocruisers, or the addition to the base scales of Pan American's flight engineers of $1.25 per hour for all hours of flight in excess of 24 hours in any month on the same equipment. The figures in the table are based on the assumption that only full-fledged flight engineers are involved. This produces results unduly favorable to Pan American. The offsetting factor is the use of assistant flight engineers by Pan American, which reduces the cost of multiple crews; and the higher rates on Stratocruisers apply of course to a much heavier type of equipment (125,000 pounds or more of certificated gross weight is the specification of the relevant provision of the agreement). The two scales are obviously not strictly comparable; but they are entirely consistent with the

five scales reflect.

In the course of the proceeding, representatives of the Union stressed frequently the importance of maintaining morale in the cockpit—contending that the "elbow-to-elbow" relationship of the flight crew necessitated such wage treatment of each member of this crew as would not generate dissatisfaction or hostility. Such an objective is an entirely praiseworthy one. It does not mean, of course, as has already been amply indicated, that pilots and flight engineers must be subject to either the same wage structure or the same wage level. Wage determinations must be guided in each case by the factors and circumstances which are relevant to the particular craft or class, including as among the most important of these factors and circumstances the scope and significance of the skills and responsibilities involved and the stream of going rates which constitute realistic evaluations of these skills and responsibilities.

In times of great economic change, however, particularly when inflationary pressures induce rapid movements throughout the economy, inequities between crafts and classes may arise independently of relative skills and responsibilities. Of this character are the inequalities in ability to maintain real earnings, in light of changes in living costs, which are created by distinctive wage policies for different types of employees. The current pay scales of TWA's flight engineers have been operative since May 1, 1950, although they were agreed upon retroactively in October of that year. The pilots' pay scales, on the other hand, date from October 1951. The wage increases for the captains and copilots, whatever the criteria for their determination and however much more they may have accomplished, did in fact contribute to the maintenance of the real earnings of the pilots. In the interest of cockpit morale, as well as in deference to considerations of equity, a cost-of-living wage increase for the flight engineers, to the extent allowable under existing governmental regulations, appears to be fully justified.

Both parties submitted evidence and argument concerning the increases in living costs between 1946 and mid-1952, as measured by the Consumers Price Index, in relation to the wage increases received by flight engineers in the course of the six collective bargaining agreements negotiated since 1946. The Union, reducing all scales as they had developed into those of the current agreement to 1946 dollars, argued that the real earnings, and hence the living standards, of the flight engineers had been substantially impaired. In terms of 1946 dollars, according to the Union's testimony, the index of real monthly rates of flight engineers, as of May 1, 1952, ranged for the various

wage brackets between a low of 81.5 and a high of 96.2 in Domestic service, and between a low of 87.0 and a high of 99.2 in International service. The additions to earnings that resulted from the built-in wage progression itself were deemed to have no relationship to the living cost problem and were disregarded by the Union. Accordingly, since the Consumers Price Index moved from 129.8 in February of 1946 to 189.0 in May of 1952, the Union argued that a 45 percent wage increase over 1946 was required (including, of course, the general increases that had already been made), in order to maintain the flight engineer's living standards. The Carrier, in contrast, included the built-in wage progression through the various 6-month steps, and not merely the general-level increases, as offsets to increased living costs. On this basis it established the following: That a flight engineer starting at any point on the TWA scale in January 1946 would have received in May 1952 a monthly average increase far in excess of the cost-of-living increase during the intervening period; that a flight engineer starting in subsequent years—in 1947, 1948, 1949, and 1950—would similarly have received by May 1952 a monthly average increase far in excess of the cost-of-living increase during the interval following his starting year; and that the average actual earnings of flight engineers for 1951 in TWA's central region (for which data were available), as compared with the average actual earnings for 1946, 1947, 1948, and 1949, far exceeded the cost-of-living increase through May 1952 (using, once more, the starting year as the base). Accordingly, the Carrier did not deem any cost-of-living adjustment as such to be required by the circumstances of this proceeding.

But the Carrier did, it will be recalled, purport to increase the wage scales of flight engineers. It did so by seeking to apply to TWA scales the general pattern of the Douglass Award. The structure of wage payments involved therein has already been rejected; and there is ample ground for rejecting also, for this carrier, the level of wage payments involved. The TWA proposal included no adjustment whatever of the International scales; and the increases alleged to be involved in its proposed modification of the Domestic scales are also of very doubtful reality. (See table on p. 21, *supra.*) The flat scales of the first 2 years would in the aggregate be the same as at present; and while a few increases would emerge at intermediate steps, the top rates, at corresponding stages, would be lower than at present. Only during the seventh and eighth years are the scales increased to any measurable degree; and the extension of the progression from eleven 6-month periods to 8 years results in such an inflation of the averages as to render them virtually unrelated to what would actually happen at each step in the graduated scale. These factors, coupled with the

proposed reduction in the guarantee available to the flight engineer as a result of the conversion to an incentive system, support with complete adequacy of the rejection of the TWA proposal from the standpoint of the level of the wages involved. At best it would be bound to produce lesser amounts than those justified by cost-of-living considerations.

In connection with the adjustment of the pay scales of TWA's flight engineers on a cost-of-living basis, the Board finds itself unable to accept either the Carrier's contention that the automatic wage increases resulting from length of service should be treated as sufficient in themselves to offset increased living costs, or the contention of the Union that all increased living costs since 1946 should be offset by the wage increases now to be recommended. The wage progression characteristic of these scales is designed to recognize increasing capacity and increasing experience, rather than rising living costs. The wage advances provided by previous collective bargaining agreements may be assumed to have reflected increased living costs as well as all other relevant factors, as of the dates of their negotiation or execution. The parties are agreed that from May 1950, when the present rates become effective, until May 1952, living costs have increased by approximately 12 percent; and that from October 1950, when the present rates were negotiated, until May 1952, living costs have increased by approximately 8 percent. Since the full extent of the then rise in living costs was not officially available in October 1950, and since the existing trend of living costs, though once more officially unavailable, is clearly upward, it is the judgment of the Board that an increase of 10 percent in the pay scales of flight engineers, rounded out to the next even $5 or $10 figure, would constitute a sound and equitable adjustment. These increases should be applied across the board, on this percentage basis, to all existing brackets in both Domestic and International service; but no increase was shown to be necessary for employees training as student flight engineers. In conformity with usual procedure, the new rates should be made effective on the day following the termination of the present contract; and since the new agreement cannot at best be consummated until about 5 months after termination of the present agreement, it should extend for a period of 2 years from the date of the present agreement.

VI. Recommendations

On the basis of the entire record, the Board submits the following recommendations:

(*a*) That the Union withdraw its wage proposals;

(*b*) That the Carrier withdraw its wage proposals;

(*c*) That the system of flat-pay scales of the present agreement be retained;

(*d*) That the pay scales of the present agreement be increased by 10 percent, so rounded out as to produce the following schedules, Domestic and International:

	Domestic	International		Domestic	International
First 6 months	$465	$525	Seventh 6 months	$625	$680
Second 6 months	490	550	Eighth 6 months	645	715
Third 6 months	520	580	Ninth 6 months	655	740
Fourth 6 months	545	605	Tenth 6 months	670	755
Fifth 6 months	575	635	Eleventh 6 months	690	770
Sixth 6 months	600	660			

(*e*) That the recommended pay scale be made effective as of May 1, 1952;

(*f*) That the duration of the contract contemplated under these recommendations be extended to April 30, 1954, subject to reopening as specified in the present agreement.

In conclusion, the Board certifies that in its opinion an agreement based upon the above recommendations will comply with the requirements of Section 502 of the Defense Production Act of 1950, as amended.

Respectfully submitted.

ADOLPH E. WENKE, *Chairman.*
ROBERT O. BOYD, *Member.*
I. L. SHARFMAN, *Member.*

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