BOOK REVIEWS


Instructors in air transportation who are organizing new courses or attempting to improve their offerings must have read the announcements of these two books with much interest. After reading the volumes the interest may have been heightened or not depending on the sort of material the instructors were seeking. Persons other than instructors are certain to have had the same experience.

AIRLINE TRAFFIC AND OPERATIONS is described as "a practical and timely text for use by those who contemplate a career in a vigorous, opportune industry. With remarkable clarity, the author describes important jobs involved in air line traffic and operations." The book succeeds quite well in accomplishing this purpose, although one wonders if the author does not let his enthusiasm for air transportation defeat his further purpose of providing "a factual and objective view." From time to time a warning appears that working for an air line requires "stick-to-itiveness," that there are "gloomy" sides to the picture, and that "the nation's air lines are in business to make money" but on the whole "those who contemplate a career in a vigorous, opportune industry" are not informed adequately of the degree to which air lines are presently compelled to adopt the most rigorous methods to operate profitably. This writer feels that the point of view found in OPPORTUNITIES FOR ESTABLISHING NEW BUSINESS IN AVIATION, published by the United States Department of Commerce in 1946 might have been more factual and objective. Baker's discussion is, of course, pointed toward employment with an air line, whereas the Commerce volume was concerned with businesses and employment other than with the scheduled operators.

In describing the duties of air line employees and the environment in which they work AIRLINE TRAFFIC AND OPERATIONS makes a contribution. This coverage includes the lives of those in the city ticket office, of the "diplomat in skirts" (the stewardess or hostess), of the air line pilot, and of the air line mechanic.

Some portions of the book will be useful to those who are seeking "air traffic management" material but the "personnel" angle dominates the "traffic" or "sales management" angles. Ticketing and routing, reservations, sales, operations, mail, express, freight, and publicity and public relations are dealt with. Only small reference is made to the role played by regulatory bodies with respect to many of these matters. The Appendix has many useful features. The book is well illustrated.

AIR PASSENGER TRAFFIC is represented as "valuable 'collateral' reading for anyone who plans to make air passenger traffic his career or who... has more than a superficial interest in the subject." The nature of the material included and the author's approach are likely to appeal to the academician. The "statistical units" which measure what an air line does and how well it does those things are briefly (possibly too briefly) reviewed and a basis is laid for determining where and in what volume
passengers will move. The description of passenger tariffs is followed by
a discussion of the "theory of fares," a section which, in spite of its brevity,
constitutes an important part of the book. The subject of scheduling is
another candidate for enlargement although the fundamentals are present.
Reservations procedure is adequately covered, so adequately in fact that
by comparison with other subjects it throws the book out of balance.

A suggestion to Professor Grossman: the present volume is in need of
a companion on cargo, and except in terms of time required for writing
there appears to be no compelling reason for separating passenger and
cargo into two separate volumes.

Virgil D. Cover*

TRAITE DE DROIT AERIEN, by Maurice Lemoine. (Recueil Sirey, Paris, 1947, pp. 867.)

This is the most thorough discussion of the many aspects of air law
that has yet come from the pen of an authority. Mr. Lemoine has for many
years been an official of Air-France and is now its Secretary-General. He
attended the International Civil Aviation Conference at Chicago in 1944
and has been active in the subsequent work of PICAQ and ICAO as a lead-
ing delegate of France. His division of the subject into 13 chapters and
1283 sections considerably exceeds that of the English authorities, Messrs.
Shawcross and Beaumont; and the detail of his discussions, covering 829
pages, far exceeds that of any other writer in the field. This is enriched
by many examples from actual practice and experience, records of facts
and events of legal significance, and a strong practical aspect based upon
intimate knowledge of the workings of large air enterprises and their rela-
tions with other business activities.

To test the flavor of so wide-sweeping a work is not easy; but a fair
sample can be taken. Mr. Lemoine devotes 140 pages — almost one-sixth
of the book — to aviation insurance; this is indeed the first thorough-going
discussion of this aspect in its more developed modern phases. It neces-
sarily touches on all the legal and operational problems, since the view of
insurance considers everything that is insurable, and not insurable, and
partly insurable, as well as those risks which, while theoretically insurable,
require such a high premium as to raise the economic question of self-
insurance.

There are nine sub-divisions: a review of the risks of aviation, the draft-
ing of insurance policies and the declaration of risks, the coverage of avia-
tion risks in life insurance and personal accident policies, the provision of
accident insurance by air carriers for their passengers, employees' accident
compensation coverage furnished by the employer against the hazards of
the employment, the insurance of liability risks, the insurance of the hull
and equipment of the airplane itself, and the insurance of air cargo. The
risks fall into four classes: those due to the airframe, motors and equipment
of the airplane (matériél volant), to the ground installations (infra-struc-
ture), to the personnel, both aloft and on the ground, and to exterior forces
and circumstances. The frequent distinction attempted between accident in
the air and on the ground is discarded as useless, both because every air
accident ends in some manner on the ground, and because it is frequently
impossible to assemble facts sufficient to permit accurate analysis of the
causation as distinguished from the circumstances. It is always difficult to
discriminate between the contributive elements of matériél, personnel, and
exterior forces.

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The ground installations, comprising the various types of aids to navigation, are strongly affected by the human element — the attentiveness and skill of the persons who operate them; they also comprise the silent obstruction hazards erected along the approach lanes of the airports, and these can be minimized by zoning laws, which France adopted in 1935. (Our earliest airport zoning law, Iowa 1933.) Attempts to analyze personnel errors in various years since 1923 indicate that errors in the air far exceed those on the ground; and that accidents in instruction and in private flying greatly exceed those of professional aviators; indeed, the small number of test-flight accidents is quite striking. The ceaseless struggle to overcome or minimize the exterior forces — mountains, fog, storms — is revealed in the daily statistics of flights completed under adverse conditions; these the public seldom or never sees, while the occasional failure due to an unsuccessful effort to fly when the conditions are adverse obtains the widest publicity. Mr. Lemoine’s closing remark upon this analysis is that underwriters preparing to underwrite such risks require a great deal of information before they can exercise their judgment. In fact, they must be fully advised both as to the operational set-up and the many aspects of the law in the countries to be flown over. An ill-considered risk, once underwritten, will either reveal an inadequate premium, or one so excessive as to be an economic burden on enterprise.

Another basic question is whether aviation today can be handled by the insurance technique. Insurance is a matter of the spreading of risks, and this requires a statistically large number of risks. The spread over twenty-five million motor cars or two million trucks, many millions of passenger elevators, or even a hundred thousand locomotives is readily insurable; but the concentration of risk upon less than a thousand air transports is quite different. The spread of fire insurance risk over billions of dollars of property values, of public liability risks over thousands of miles of sidewalks and numberless house-entries and stairways, is the ideal for an insurance system; its concentration on a few hundred large passenger vessels is only possible by assimilation with the larger fleets of merchant vessels. It remains today a question whether aviation risks are yet, statistically, a sound insurance proposition. The spreading of the risks at the other end, by re-insurances amongst the underwriters, does not reach the basic issue. However, as the number of air passengers steadily increases, the basis for sound accident and life insurance coverage becomes continually firmer. Mr. Lemoine reviews the many factors, and concludes that time will produce those necessary for sound insurances, namely, the multiplicity of insurable interests, resulting in a wide spread of risk; a large premium income; and the accumulation of insurance reserve funds.

A review of the French laws touching upon the legal authority of underwriters to accept aviation risks is of narrower interest to the foreign reader; but the same problem exists in every country, and our own legislation annually reflects the efforts of underwriters to obtain legislative approval for a continually expanding insurance coverage in aviation. And the efforts to set up some international system of compulsory insurance for foreign-going aviation cannot prosper until there is, in each country affected, legal authority for furnishing the required coverages. A willingness to “admit” a foreign underwriting as satisfactory for compliance with local insurance requirements becomes necessary; for the task of obtaining local insurance in each political division and sub-division flown over becomes an impossible burden. Mr. Lemoine cites Brazil, Czechoslovakia and Thailand as examples of countries which require foreign air lines to make insurance contracts with native insurance companies; more instances could be listed. This is a burden which aviation does not share with international shipping.
The passages concerning the declaration of risks covered deals with the French law on the subject, but this again is a general problem; namely: when the language chosen is inexact or ambiguous, how shall border-line cases be decided? On the one hand, the underwriter is liable for his own ambiguities; but on the other, the applicant for insurance is liable for his own careless errors and especially culpable for his deliberate deceits. Insurance is a matter of *uberrimae fides* between insurer and assured. Unexpected deviations from the assured program occur, and are known only after the event; risks do not always terminate when expected and must be prolonged. Good analogies are readily obtainable in the field of marine insurance, where similar problems have been handled for many decades.

The author's analysis of personal life and accident insurance is largely concerned with extension of individual policies to include air risks; but it also describes the pre-war European system of furnishing personal coverage as part of the passenger ticket, which is a feasible alternative for carrier's liability in so many countries; it is of course considered a useless service by American carriers because our judges adhere to the more and more unique public policy that a common carrier may not contract out of his liabilities nor contract to diminish them in respect of passengers, so that an accident policy cannot replace the liability risk and too often merely furnishes the finances for a liability lawsuit, against the very carrier who thoughtfully arranged the accident insurance protection for the passenger.

This leads to an interesting account of the extent to which the Warsaw Convention has been accepted by European nations as the basis for an identical or similar limitation of passenger liability for domestic air carriage. Such acceptance is much more widespread than is realized in the United States, and points again to the increasing solitude of the American attitude in opposition to limitation of the carrier's liabilities. The following countries have limited their air carriers' liabilities per passenger: Italy (the Warsaw Convention limit, equivalent to $8,300 U.S.), Poland (20,000 zlotys of 1935); Sweden, 18,250 crowns; Denmark, 18,250 crowns; Belgium, 250,000 Belgian francs of 1936; Netherlands, (2,000 florins of 1936). All of these countries permit the carrier, "more or less easily," to defend by showing that there was no negligence. Germany had a different system: the carrier could either have a negligence lawsuit usually but not necessarily subject to the Warsaw limit (20,000 marks) or the benefit of an accident policy (30,000 marks). Air-France had a similar arrangement. In Great Britain, the Warsaw Convention was enacted as the law for domestic carriage in 1932, subject to an Order in Council which has never been promulgated; if it should be put into force, the limit would, in today's money, be £2,000.

When the carrier's possible liability is based on negligence and is either unlimited (limited only to what the plaintiff can prove and the jury may grant and the judges affirm), general liability insurance for fantastic amounts becomes necessary. Such insurance, the author remarks, is for the benefit of the carrier. While that was the old principle, that a liability underwriter only re-imburses his assured for what the assured was compelled to pay the victim, it should be mentioned that this has been profoundly modified in England and in most of the American States, by statutes providing in effect that if the judgment debtor fails to satisfy the judgment, the liability underwriter may be sued directly on the judgment. These statutes, based on automobile cases, also apply to the airplane. And it would appear that the problem of privity of the general managers, or *déchéance*, is not unknown on the Continent.

There is an interesting account of the personal accident policy for the pilot; a review of the many conditions and limitations imposed leads to the
remark that this type of coverage results in many lawsuits, and the observation et conseil pratique that it would be better to re-adjust the clauses now offered and re-appraise the appropriate premiums, so as to give more satisfactory service to the assureds.

The description of the French workmens’ compensation coverage (accidents de travail) indicates a series of exceptions seriously limiting its social utility. In France, there are only two sources of such coverage. The discussion closes with a careful account of insurance of the aircraft against fire, crash and other hazards, and of the “insured bill of lading” offered by Air-France.

The foregoing example indicates the thoroughness with which Mr. Lemoine has assembled and reviewed facts and law as to the other topics of aviation law with which he deals. One may only cavil at the inadequacy of the alphabetical index, which does not begin to reveal or make accessible the many passages of useful description and discussion in these pages. As a single example, the problem of dol is indexed twice, but there are at least five other references to it, and the important discussion at page 832 is not indexed at all. The student will read these pages pencil in hand.

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PROBLEMS OF ACCELERATING AIRCRAFT PRODUCTION DURING WORLD WAR II, by Tom Lilley, Pearson Hunt, J. Keith Butters, Frank F. Gilmore, and Paul F. Lawler. (Cambridge: Division of Research, Graduate School of Business Administration, Harvard University, 1947. pp. 112. $1.50.)

This study was undertaken at the request of the War, Navy and Commerce Departments and was used by a subcommittee of the Air Coordinating Committee in formulating a plan for industrial preparedness for the aircraft industry. This is the type of research that is particularly valuable for students of industrial organization and management. It also has value as a record of the problems faced by the industry in expanding to meet the requirements of modern aerial warfare. It is primarily historical and should serve a useful purpose should we be faced with a similar problem within the next ten years.

From the standpoint of national preparedness the report renders a valuable service in pointing out how long it takes to get a given design into mass production unless it has already been flight tested and tried out under operating conditions. It also points out the fact that is common knowledge to men in the industry that engineering changes continue to be made on a given design as weaknesses develop in field operations.

The authors are to be commended for their objectivity in reporting their findings. This study should be read by all members of Congress and other persons charged with the responsibility of formulating a policy for national aerial defense.

From the standpoint of manufacturing processes and techniques and the organization required for expanding a peace time industry to meet the requirements of war, Section IV is the most interesting. Should occasion require a repetition of this expansion within the next ten to twenty years there will be many executives who are familiar with their earlier experiences. This study would be valuable reading for new companies that might be brought into the service of the nation in aircraft production.

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