

ADMISSIBILITY AND EFFECT OF GOVERNMENT APPROVAL AND CERTIFICATION OF AIRCRAFT

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In recent years there have been a number of airplane crashes caused by factors apparently within the control of the manufacturer of the airplane rather than the operator. Thus, in September of 1959, and May, 1960, Lockheed Electra aircraft came apart in the air due to factors apparently related to the design of the aircraft, rather than its operation by Braniff Airways and Northwest Airlines, respectively. In 1948, a Northwest Airlines' Martin 202 came apart, again apparently because of factors relating to design, rather than operation. In addition, a number of small airplanes have sustained structural failures in flight, resulting in claims directed at the integrity of the aircraft, rather than fault on the part of the operator. Many of these accidents have led to litigation, and the litigation has inevitably sought to define responsibility for alleged improper design of the aircraft. This has led to the question of responsibility, under a system where the design itself must be "certificated" or "approved" by the responsible government agency.

The question of the significance of such certification or approval has naturally arisen. If the responsibility of the government is predominant, then, presumably, in litigation arising from these accidents, the government might be held just as liable, or more liable, than the manufacturers. If, on the other hand, the responsibility of the government is limited, the liability of the manufacturer would appear to be unaffected, and the government would ordinarily not even be a party to the litigation.

Illustrative of the problem is litigation arising out of an airplane accident which occurred in 1953. A small airplane sustained a structural failure in flight under marginal weather conditions. In litigation brought by the estate of the pilot against the manufacturer,¹ the latter took the position that the responsibility of the government was so great that it had preempted the field; that the Civil Aeronautics Administration had ruled on the airworthiness of the aircraft and its conformance to all accepted standards; and that it would hardly

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¹ *Prashker v. Beech Aircraft Corp.*, 258 F.2d 602 (3rd Cir. 1958), cert. denied, 358 U.S. 910 (1958).

do for a lay jury to overrule the judgment of the responsible government agency. The plaintiff in that case took the position that certification of the airplane by the Civil Aeronautics Administration constituted nothing more than the government's determination that the airplane conformed with the minimum standards of the Civil Air Regulations. The defendant took the deposition of a high official of the Civil Aeronautics Administration who testified that certification implied not only conformance with minimum standards of the regulations, but, in addition, a subjective determination on the part of the government that the aircraft was safe.

The legal importance of this determination is further indicated in the CAB hearings into the Lockheed Electra structural crashes. In Los Angeles, on July 21, 1960, this same official, now of the successor agency, the Federal Aviation Agency, read from a letter written during May of 1956 by the Administrator of Civil Aeronautics to the Chairman of the Civil Aeronautics Board as follows:

Authority for this procedure is found in section 603-A of the Civil Aeronautics Act as modified by reorganization plans. Section 603-A, after stating that the Administrator is empowered to issue Type Certificates for aircraft, aircraft engines and propellers, goes on to say that if the authority finds that such aircraft, engines, propellers or appliances are of proper design, material specification, construction, and performance for safe operation and meet the minimum standards, rules and regulations prescribed by the Board, it shall issue a Type Certificate therefor.²

A. THE CERTIFICATION PROCESS

The basic authority under which most present day aircraft have been certificated is the Civil Aeronautics Act of 1938, as amended.³ The authority under which new aircraft are being certificated is the Federal Aviation Act of 1958,⁴ which, in this respect is exactly the same as the former act.

Section 601 (a) of both acts provides:

The administrator is empowered and it shall be his duty to promote safety of flight of civil aircraft in air commerce by prescribing and revising from time to time:

(1) Such minimum standards governing the design,

² Testimony of William Henry Weeks, Volume II, CAB transcript, Docket No. SA-354, pp. 262-65, July 21, 1960.

³ 52 Stat. 1007 (1938), 49 U.S.C. §§ 551-60 (1958).

⁴ 72 Stat. 731, 49 U.S.C. §§ 1301-1542 (1958).

materials, workmanship, construction, and performance of aircraft, aircraft engines and propellers as may be required in the interest of safety:

(2) Such minimum standards governing appliances as may be required in the interest of safety.⁵

Section 603 (a) provides:

(1) The Administrator is empowered to issue type certificates for aircraft, aircraft engines, and propellers; to specify in regulations the appliances for which the issuance of type certificates is reasonably required in the interest of safety; and to issue such certificates for appliances so specified.

(2) Any interested person may file with the Administrator an application for a type certificate for an aircraft, aircraft engine, propeller, or appliance specified in regulations under paragraph (1) of this subsection. Upon receipt of an application, the Administrator shall make an investigation thereof and may hold hearings thereon. The Administrator shall make, or require the applicant to make such tests during manufacture and upon completion as the Administrator deems reasonably necessary in the interest of safety, including flight tests and tests of raw materials or any part or appurtenance of such aircraft, aircraft engine, propeller, or appliance. If the Administrator finds that such aircraft, aircraft engine, propeller, or appliance is of proper design, material, specification, construction, and performance for safe operation, and meets the minimum standards, rules and regulations prescribed by the Administrator, he shall issue a type certificate therefor. The Administrator may prescribe in any such certificate the duration thereof and such other terms, conditions and limitations as are required in the aircraft, aircraft engines, or propellers, a numerical determination of all of the essential factors relative to the performance of the aircraft, aircraft engine, or propeller, for which the certificate is issued.⁶

Section 603 (c) of the 1958 Act provides:⁷

(c) The registered owner of any aircraft may file with the Administrator an application for an airworthiness cer-

⁵ 72 Stat. 775, 49 U.S.C. § 1421(a) (1958).

⁶ 72 Stat. 776, 49 U.S.C. § 1423(a) (1958).

⁷ The 1938 act, 52 Stat. 1012 (1938), 49 U.S.C. § 560(a) (1958), was the same

tificate for such aircraft. If the Administrator finds that the aircraft conforms to the type certificate therefor, and, after inspection, that the aircraft is in condition for safe operation, he shall issue an airworthiness certificate. The Administrator may prescribe in such certificate the duration of such certificate, the type of service for which the aircraft may be used, and such other terms, conditions, and limitations as are required in the interest of safety. Each such certificate shall be registered by the Administrator and shall set forth such information as the Administrator may deem advisable. The certificate number, or such other individual designation as may be required by the Administrator, shall be displayed upon each aircraft in accordance with regulations prescribed by the Administrator.⁸

Section 610 (a) makes it unlawful for any person to operate in air commerce any civil aircraft for which there is not currently in force an airworthiness certificate.⁹

Thus, it is clear that certification is an integral part of the manufacturing and utilization of civil aircraft in the United States. It is not like the "Good Housekeeping Seal of Approval" as one appellate judge flippantly remarked.¹⁰ It is a *sine qua non*, without which a manufacturer may not sell and an operator may not use an airplane.

"Certification" consists, generally, of the awarding of a Type Certificate to a manufacturer of an airplane, airplane engine, or propeller, which, generally, attests to the safety of the design, plus an "Airworthiness Certificate" attesting to the airworthiness or safety of the particular airplane.

The type certificate itself, issued by the old CAA, or the present FAA states that the aircraft is of proper design and related characteristics for safe operation and that it complies with the minimum requirements of the Civil Air Regulations.

The Civil Air Regulations are an extensive and detailed body of rules and requirements relating to every phase of civil aviation, including the design and performance of aircraft. Prior to the enactment of the Federal Aviation Act of 1958 they were enacted by the

except that the Board, instead of the Administrator, had the authority to prescribe the terms, conditions and limitations of the certificate.

⁸ 72 Stat. 776, 49 U.S.C. § 1423(c) (1958).

⁹ 72 Stat. 780, 49 U.S.C. § 1430(a) (1958).

¹⁰ Judge Goodrich, on the oral argument of *Prashker v. Beech Aircraft Corp.*, supra note 1.

Civil Aeronautics Board,¹¹ a quasi-judicial independent agency which promulgated the regulations, awarded airline routes, ruled on safety infringements, and investigated and determined probable cause of aircraft accidents.¹² Enforcement of the regulations, including the awarding of type, production, and airworthiness certificates was left to the Civil Aeronautics Administration, an agency of the Department of Commerce.¹³

With the advent of the Federal Aviation Act of 1958 the function of promulgating the regulations was shifted from the Civil Aeronautics Board to the newly created Federal Aviation Agency.¹⁴ The agency also maintained the previous function of the Civil Aeronautics Administration of enforcement of the regulations, so that at the present time the FAA both enacts and enforces the Civil Air Regulations. The Civil Aeronautics Board still maintains its quasi-judicial function of ruling on violations of regulations.

To obtain approval for its airplane an aircraft manufacturer files an application for a type certificate with the Federal Aviation Agency. The regulations applicable to the granting of this type certificate are considered those regulations in force at the time of the application.¹⁵ The manufacturer then submits extensive data to the FAA. In the case of a small airplane this material might fill three standard file drawers.¹⁶ The material, generally, consists of all the basic design data on the airplane including drawings, engineering studies, and flight test reports.

The FAA then conducts its own flight and evaluation tests and reviews all of the data and information supplied by the manufacturer. If it determines that the airplane meets the requirements of the regulations, and if it subjectively finds that the airplane is "safe", it issues a type certificate. This, as indicated above, is a document that certifies that the airplane meets the minimum standards of the regulations and has no characteristic rendering it unsafe for normal operation.¹⁷

With changes in the design of the aircraft, when the basic design remains the same, the type certificate is amended to incorporate the change. A major change in the model, however, will result in the issuance of a new and separate type certificate, since

¹¹ 52 Stat. 980 (1938), 49 U.S.C. § 421 (1958).

¹² 52 Stat. 984 (1938), 49 U.S.C. § 426 (1958).

¹³ 52 Stat. 985 (1938), 49 U.S.C. § 452 (1958).

¹⁴ 72 Stat. 775, 49 U.S.C. § 1421(a)(3) (1958).

¹⁵ 14 C.F.R. § 4b.11(a) (Revised 1961).

¹⁶ Deposition of William Henry Weeks, p. 10, *Prashker v. Beech Aircraft Corp.*, Civ. No. 1643 (D. Del. Aug. 14, 1952).

¹⁷ 14 C.F.R. § 406.14(a) (Revised 1961).

the new aircraft is considered a basically different aircraft from its predecessor.

In the evaluation process that precedes the granting of a type certificate, the FAA may and does suggest changes in the design or in the characteristics of the airplane. These suggestions are, of course, discussed with the manufacturer, and usually lead to the changes being made, or to some substitute change being made, since the manufacturer must satisfy the FAA (or must have satisfied the old CAA) to obtain its type certificate. Thus, in the case of the original Beechcraft Bonanza airplane the design dive speed was 250 miles per hour. The Civil Aeronautics Administration felt that this speed was too great and suggested that it be reduced to 225 miles per hour. This was done by the manufacturer, and 225 miles per hour remained the designed dive speed through seven models of the Bonanza.

To varying degrees the manufacturer may shift the burden of examination and testing, leading to certification, to itself. Manufacturers of small airplanes (those having a maximum weight of less than 12,500 pounds) may follow the "Delegation Option Procedures" specified in Part 410 of the Civil Air Regulations.¹⁸

Under this Part, upon application by a qualified manufacturer, the Administrator may "delegate the functions to properly qualified private persons."¹⁹ Such a person, known as a Designated Manufacturer's Certification Representative (DMCR) must hold a responsible position in the manufacturer's organization with respect to the design and manufacture of the airplane, and must have been issued a certificate by the Administrator. To qualify under the Delegation Option Procedure a manufacturer must already hold a Type Certificate and Production Certificate and must employ a competent staff of engineering, flight-test, production and inspection personnel adequate to maintain compliance with the applicable certification requirements.²⁰

Even under this procedure the actual certification of the aircraft is given under the sharp scrutiny and review of the Federal Aviation Agency. At any time the FAA may inspect the manufacturer's organization, facilities, product and records.²¹ In addition, the criteria used by the DMCR to determine airworthiness, the substantiation process utilized, and the characteristics of the design itself

¹⁸ 14 C.F.R. §§ 410.11-410.18 (Revised 1961).

¹⁹ 14 C.F.R. § 410.2 (Revised 1961).

²⁰ 14 C.F.R. § 410.13 (Revised 1961).

²¹ 14 C.F.R. § 410.18 (Revised 1961).

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must all be approved by the FAA.²² The FAA also "will verify compliance with standards, rules and regulations for unconventional designs and/or design features having a substantially significant effect on safety, and will determine that there are no apparent un-airworthy features."²³ The FAA may also verify compliance and may, to the extent it desires, participate in the test programs. The type certificate itself is still issued by the Administrator upon application and a Statement of Compliance submitted to it by the DMCR. Once a type certificate has been issued, however, a DMCR may himself issue an airworthiness certificate for particular airplanes that he finds conform to the type design and are in condition for safe operation.²⁴

The FAA may at any time withdraw a manufacturer's privileges if the manufacturer has not complied with the requirements of the procedure.²⁵

In addition to the designation option procedures, which are limited to small aircraft, Part 418 of the Civil Air Regulations provides for "Representatives of the Administrator" including "Designated Engineering Representatives" (DER). The type of engineering representative designations issued by FAA are: structural engineering, powerplant engineering, systems and equipment engineering, radio engineering, propeller engineering, flight analyst and flight test pilot.²⁶

A DER may approve engineering data and other considerations in his field within limitations prescribed by the Administrator and under his general supervision.²⁷ A flight test pilot representative, for example, who would normally be a flight test engineer employed by the manufacturer, could conduct flight tests, "and prepare and approve flight test data, relating to compliance with Civil Air Regulations within limits prescribed by and under the general supervision of the Administrator or his authorized representative."²⁸

In the certification of the Lockheed Electra, for example, many analyses and tests were performed by designated Lockheed employees, with the data and results submitted for approval to the then Civil Aeronautics Administration.²⁹ The CAA itself organized a Type Certification Board which conducted the certification processes relating

²² 14 C.F.R. § 410.32 (Revised 1961).

²³ 14 C.F.R. § 410.32(a)(2) (Revised 1961).

²⁴ 14 C.F.R. § 410.32(b) (Revised 1961).

²⁵ 14 C.F.R. § 410.36(f) (Revised 1961).

²⁶ 14 C.F.R. § 418.24(a) (Revised 1961).

²⁷ 14 C.F.R. § 418.24(6) (Revised 1961).

²⁸ 14 C.F.R. § 418.24(6)(8) (Revised 1961).

²⁹ Testimony of Edward H. Spalding, *supra* note 2, at 232-55.

to the airplane. Three formal meetings were held by this board, each of which was attended by about twenty-four CAA representatives from both the Washington, D.C., and Regional Offices. CAA personnel witnessed all major tests and conducted many of their own. In all, CAA personnel expended approximately 19,000 engineering man hours on the Electra type certification project.³⁰

B. ADMISSIBILITY IN EVIDENCE OF CERTIFICATION OF AIRCRAFT

There is only one reported case in which the question of admissibility of a type certificate or airworthiness certificate was squarely presented. *Maynard v. Stinson Aircraft Corporation*³¹ held that a certificate of airworthiness was not admissible because of a failure, *in that case*, to lay a proper foundation; specifically, to prove the particular inspections upon which it was based. The court said:

The plans might have been carefully checked by the experts of the United States Government. Then again they might not. The parties were denied the opportunity by federal officials to find out whether they were or were not checked, and therefore the certificate itself becomes immaterial and incompetent in this case.³²

The court also stated:

There is testimony here that an inspector of the Department of Commerce inspected this plane before it was licensed for sale. The fact of the inspection is established. What inspection was made is not established. The testimony is offered here and is given here of employees or officers of the Stinson Aircraft Corp. that a United States inspector did appear and did examine the plane, but they cannot testify as to what examination he made. Only the man who made the investigation can testify what kind of an examination he made, and that man has not been produced as a witness here in this case.³³

The clear implication of the *Maynard* case, however, is that, in an action against an aircraft manufacturer involving the allegation of bad design, if a proper foundation is offered, the certificate of airworthiness would be admissible.

³⁰ Testimony of C. R. Hawks, *supra* note 2, at 276-93.

³¹ (Cir. Ct. Wayne County, Mich. No. 197,605, Oct., 1937), 1940 U.S. Av. Rep. 71, 1 Avi. 698.

³² *Id.* at 80, 1 Avi. at 703.

³³ *Id.* at 79, 1 Avi. at 702.

In *Prashker v. Beech* the question of admissibility of the Bonanza's type certificate was considered by the court in pretrial.⁸⁴ The plaintiffs, in the *Prashker* case, claimed that the airplane was improperly designed and that it was manufactured by Beech after knowledge of the defects. Beech indicated it would offer, at the trial, the type and airworthiness certificates. The plaintiffs argued that the certificates themselves were not admissible unless it was first shown that the matters in issue (the particular characteristics of the airplane that the plaintiffs claimed were unsafe) had been explored or examined by the CAA, prior to issuing the certificates. The plaintiffs also claimed that the certificates could only be admitted through the testimony of the CAA inspectors who actually granted them.

The defendant Beech argued that the type certificate itself was admissible "both as an official record pertinent to this case, to establish that the Bonanza complies with all Civil Air Regulations, and as an element to be weighed by the jury in deciding whether or not Beech had notice."⁸⁵ In its pretrial opinion the court stated:

. . . I am of the opinion that the certificates would not be admissible as to the general safety or approval of the plane but would be admissible as tending to negative notice of general unsatisfactory nature of the plane arising from prior accidents.

The complaint alleges a duty on Beech to make tests. A certificate showing that tests were made would be admissible to meet the allegations of the complaint regardless of the specific nature of the tests.⁸⁶

Thus, in effect, the court took the position that since the plaintiff was not only claiming negligence in the design of the airplane, but was claiming knowledge or notice on the part of Beech of the fact that the design was poor, the certificate itself, or the mere receipt from the government of the certificate was admissible on the narrow issue of notice. It would not, however, be admissible on the issue of negligent design itself. Apparently with the desire of having the type certificate admissible for all purposes, Beech subsequently took the deposition of the CAA official who actually granted the certificate.

It is thus apparent that in the only known litigation to date, the only objections to the admissibility of type or airworthiness certificates

⁸⁴ Pretrial opinion of August 13, 1957, *Prashker v. Beech Aircraft Corp.*, *supra* note 16.

⁸⁵ Pretrial brief of defendant Beech, in *Prashker v. Beech Aircraft Corp.*, *supra* note 16.

⁸⁶ *Supra* note 34, at 10.

have been directed to the question of proper foundation. It would appear to be possible, if not probable, that in future litigation against aircraft manufacturers, based upon improper design or improper construction of aircraft, plaintiffs will take the position that, even assuming a proper foundation, the certificates issued by a third party (the CAA or the FAA) should not be admissible on issues between the injured party and the manufacturer. It may be argued that the ultimate question of whether the design or construction was good or bad is for the jury in the particular case, rather than for the government agency. Thus, it may be argued that approval by the government is incompetent and immaterial, as evidence of the propriety of the design and construction. It is difficult to speculate on what the courts will do with these arguments. It would seem on the surface, however, that considering the important part in the manufacturing process that certification plays, and considering further the fact that a type certificate and an airworthiness certificate are *required*, before an airplane can be flown, plaintiffs will have great difficulty in excluding such evidence.

C. THE LEGAL SIGNIFICANCE OF CERTIFICATION

In *Prashker v. Beech Aircraft Corp.*,³⁷ the defendant, Beech Aircraft Corporation, took the position that approval and certification of an aircraft by the Civil Aeronautics Administration was a fact of such legal significance that it pre-empted the question of proper design; that it would be improper and contrary to the intention of Congress in enacting the Civil Aeronautics Act of 1938 to permit a common law jury to overrule the judgment of the competent governmental agency. In its brief to the Court of Appeals, Beech stated:

When it is considered that the CAA reviewed the design and construction of the Bonanza, and inspected and flight tested it, and issued a Type Certificate indicating that it had no unsafe features and further that the CAA inspected this very plan and issued an Airworthiness Certificate certifying that it was safe to fly, then we realize that what plaintiffs have done in this case is ask a jury of laymen to overrule the experts, to hold that technical decisions made by trained CAA officials in the extremely complicated field of aerodynamics were wrong. In short, the jury is asked to conclude, on the basis of obscure and contradictory testimony, phrased in vague, indefinite and speculative terms by men who never have flown a Bonanza or witnessed a Bonanza

³⁷ Supra note 1.

flight test that the Bonanza design is unsafe, although the CAA experts came to a different conclusion after months of study, investigation, and actual flight tests.

Certainly, a presumption that Beech exercised due care arises from the careful certification process. *Livesley v. Continental Motors Corp.*, 331 Mich. 434, 49 N.W.2d 365 (Sup. Ct. 1951). Plaintiffs introduced no evidence which could overcome this presumption. But our argument extends further. The standards prescribed by the CAB are intended to provide full protection. It would be productive of utter chaos if in connection with any accident a court or jury would be permitted to conclude that a CAB safety regulation was incorrect and to hold an aircraft manufacturer liable for not complying with some other standard. This would in effect constitute the court or jury a Board of Review over the CAA, a result clearly not contemplated by the statute. Airplane manufacturers complying with CAB directives would be faced with the possibility of being held liable for designs which were approved, possibly even required by the duly constituted regulatory Board. The result would be not the promotion of air commerce contemplated by the statutes, but the reverse as airplane manufacturers would find themselves devoting a considerable portion of their energies to developing evidence in a manner which may be clear and comprehensible to the numerous lay juries who would be sitting in review over the design of their airplane. We submit that Congress has given to the CAA exclusive control over the design of airplanes flown in the United States and any issue of the adequacy of such standards cannot be submitted to an untrained, lay, common law jury.³⁸

The other defendant in the *Prashker* case, Atlantic Aviation, Inc., the distributor of the airplane, argued in its brief "that the CAA's certification of the type and of the actual plane involved is conclusive evidence that the plane was reasonably fit for flying. . . ."³⁹ The Court of Appeals did not consider the question, affirming the direction of a verdict for the defendants on other grounds.

An interesting analogy is presented by the recent case of *Weiss v. Fote*.⁴⁰ This was an action against the City of Buffalo arising out of

³⁸ Appellate brief for defendant Beech, in *Prashker v. Beech Aircraft Corp.*, supra note 1, at pp. 27-29.

³⁹ Appellate brief for defendant Atlantic Aviation Co., in *Prashker v. Beech Aircraft Corp.*, supra note 1, at p. 12.

⁴⁰ 7 N.Y.2d 579, 167 N.E.2d 63 (1960).

an automobile collision at an intersection, in which the plaintiffs claimed that the traffic lights maintained by the city were negligently designed in that the clearance interval of four seconds between the time that the green signal in one direction stopped and the green signal in the other direction began, was too short, thus enabling drivers from different directions to enter the intersection at the same time. The city had proved that the lights had been designed by its Board of Safety after a thorough study of traffic conditions. The trial court instructed the jury to find the city liable if it were negligent in failing to provide a sufficient "clearance interval," and the jury returned a verdict against the city which the Appellate Division affirmed.⁴¹

The Court of Appeals, in a 4 to 3 decision, reversed stating that "the City's defense which we here sustain rests not on any anachronistic concept of sovereignty, but rather on a regard for sound principles of government administration and a respect for the expert judgment of agencies authorized by law to exercise such judgment."⁴² The court said:

We are of the opinion that the traditional reliance on a jury verdict to assess fault and general tort liability is misplaced where a duly authorized public planning body has already entertained and passed on the very same question of risk as went to the jury. Although a jury verdict is to be highly regarded, it is neither sacrosanct nor preferable to the judgment of an expert public planning body.⁴³

As applied to the legal effect of certification of aircraft by the government it is important to note that the issue "already entertained and passed on" by the public planning body (the CAA or FAA in the case of aircraft) may not be "the very same question of risk" that is to go to the jury in the civil litigation. In the case of *DeVito v. United Airlines, Inc.*,⁴⁴ the estate of a deceased passenger on a United Airlines DC-6 claimed that one of the defendants, Douglas Aircraft Corporation, which had manufactured the airplane, was negligent in failing to establish proper emergency procedures to cope with the possibility of release of carbon dioxide fumes in the cockpit. Douglas answered, in part, that the emergency procedure which it had established had been approved by the Civil Aeronautics Administration. The court stated:

This contention, however, ignores the important fact that the DEV 133 report submitted by Douglas to the Civil Aero-

⁴¹ 8 App. Div. 2d 692 (New York 1959).

⁴² 7 N.Y.2d at 588, 167 N.E.2d at 67.

⁴³ Id. at 588, 167 N.E.2d at 67-68.

⁴⁴ 98 F. Supp. 88 (E.D.N.Y. 1951).

navitics Administration, and the basis upon which the Civil Aeronautics Administration granted its airworthiness directives after modification contained no reference to the effects of carbon dioxide upon flight personnel during the flight tests of January and February, 1948. Nor, as has been said herebefore, had Dr. White's report been submitted to the Civil Aeronautics Administration at the time when Douglas applied for approval of the emergency procedure, or at any time.⁴⁵

To put the argument another way, a CAA or FAA type certificate will normally be based, at least in great part, upon information supplied by the manufacturer to the government agency. If the plaintiff can show that the information provided by the manufacturer to the agency was incomplete or insufficient, then, of course, the question of safety passed upon by the government agency will not have been the same as that passed upon by the jury in the litigation. Or it may be that the simple issue presented to the jury will be the manufacturer's negligence in failing to make known to the CAA or FAA, among others, vital information concerning the airplane.

Another distinction between the effect of CAA or FAA certification on the one hand, and the effect of approval of the "clearance interval" by the city planning body, in the *Weiss* case on the other, lies in the relative simplicity of the task of the planning body in fixing a time interval for traffic lights, as compared with the review of all safety characteristics of a fairly complex modern airplane. In the certification of aircraft, for example, the governmental agency itself may be negligent in failing to obtain sufficient information or in failing to perform adequate tests. This would appear to be less likely in the case of a public planning body determining what an adequate clearance interval would be for traffic lights. The latter would appear to be closer to a pure question of judgment on the part of competent people. Inspection and testing of aircraft, however, may be in large part an administrative task involving the detailed accumulation of data and information. Nevertheless, the principle of *Weiss v. Fote*⁴⁶ may be expected to be raised in litigation involving the effect of certification of aircraft.

There is virtually no case law throwing light on the significance of government approval of aircraft. *Livesley v. Continental Motors Corp.*⁴⁷ approved the admission of evidence that an aircraft engine conformed with CAA standards. Judgment was entered for the defendant because of plaintiff's failure to prove negligence rather than

⁴⁵ Id. at 96.

⁴⁶ Supra note 41.

⁴⁷ 331 Mich. 434, 49 N.W.2d 365 (1951).

any definitive effect of CAA approval however. *Boulineaux v. City of Knoxville*⁴⁸ approved the admission into evidence of the certificate of airworthiness. The court said: "The examination of the certificate was but a part of the inspection of the qualifications of the machine and its operator and this inspection was an issue in the case . . ."⁴⁹

Some clue as to how the courts may react to the question may be drawn from other situations. *Yoffee v. Pennsylvania Power & Light Co.*⁵⁰ was a case brought by the estate of a pilot of a small airplane that had struck power lines strung across the Susquehanna River by the defendant Power and Light Company. The defendant introduced evidence to the effect that it had obtained a license, or consent, of the competent governmental authorities to span the river. The court stated "The defendant stressed the fact that it had obtained license or consent of governmental authorities to span the river with its wire, but this license did not immunize the company from responsibility for negligence or for creating a hazard to the public."⁵¹

*Nysted v. Wings, Ltd.*⁵² was an early case against an air carrier involving a defective propeller which had failed because of a fatigue crack which the defendant argued was undiscoverable. The defendant also claimed that its airplanes as well as its pilots and engineers were all under the supervision of the Aeronautics Act. The court stated:

Finally, the evidence of government supervision of commercial aviation is immaterial insofar as it is designed to afford a shield or protection for the defendant. That supervision is intended only to assist commercial aviators in guarding against the dangers incidental to the hazardous business, not to relieve them of responsibility to the passengers they carry. That responsibility rests at all times upon the carriers, and upon them alone; so much so that nothing less than a release, express or implied, from their passengers can relieve them of their obligation to exercise adequate care in all that pertains to safety in carriage.⁵³

It would seem probable that courts will, in appropriate situations, admit evidence of CAA and FAA certification and approval of aircraft as some evidence of due care on the part of the manufacturer. It does not appear likely that they will hold certification to be a binding determination of the safety or proper design of the aircraft.

⁴⁸ 20 Tenn. App. 404, 99 S.W.2d 557 (1935).

⁴⁹ Id. at 410, 99 S.W.2d at 561.

⁵⁰ 385 Pa. 520, 123 A.2d 636 (1956).

⁵¹ Id. at 535, 123 A.2d at 645.

⁵² 51 Man. 63, 3 D.L.R. 336 (King's Bench, Manitoba, Canada 1942).

⁵³ Id. at 78, 3 D.L.R. at 349.