

HJR

46

# Alaska State Legislature



## House of Representatives

### Committee on Transportation

Rep. Bette Cato, Chairman

Pouch V  
State Capitol  
Juneau, Alaska 99811  
(907) 465-4858

January 27, 1988

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#### COMMITTEE CALENDAR:

HJR 46: Requesting the Federal Aviation Administration to exempt aircraft in Alaska from regulations on the size of aircraft registration numbers and on supplemental identification plates.

This is a first public hearing

#### FOR THIS MEETING, YOUR PACKET INCLUDES:

- item #1: HJR 46
- #2: SJR 56
- #3: the new regs
- #4: the old regs
- #5: press release
- #6: misc. backup
- #7: info on the proposed zone changes

1 IN THE HOUSE

BY FRANK, ADAMS, MILLER,  
BOYER, KOPONEN, ULMER,  
PEARCE AND DAVIS

2 SPONSOR SUBSTITUTE FOR HOUSE JOINT RESOLUTION NO. 46

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - SECOND SESSION

5 Requesting the Federal Aviation Adminis-  
6 tration to exempt aircraft in Alaska  
7 from regulations on the size of aircraft  
8 registration numbers and on supplemental  
9 identification plates.

10 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 WHEREAS agencies of the federal government sometimes adopt regulations  
12 that have detrimental effects on the Alaskan economy and that cause in-  
13 convenience to Alaskans; and

14 WHEREAS federal regulations are sometimes not relevant to Alaska and  
15 serve no useful purpose; and

16 WHEREAS the Federal Aviation Administration has adopted regulations  
17 that require 12-inch registration numbers on aircraft entering or leaving  
18 an Air Defense Identification Zone (ADIZ) or a Distant Early Warning Iden-  
19 tification Zone (DEWIZ) and a supplemental identification plate on the  
20 exterior of aircraft; and

21 WHEREAS some parts of Alaska are included within an ADIZ or DEWIZ and  
22 other parts are not, and thus those aircraft that fly in and out of these  
23 zones must display 12-inch registration numbers, but those aircraft that  
24 never enter or leave one of these zones may continue to display three-inch  
25 registration numbers; and

26 WHEREAS it is nearly impossible to predict whether an aircraft in  
27 Alaska will ever need to enter or leave an ADIZ or DEWIZ; and

28 WHEREAS compliance with these regulations imposes an estimated cost of  
29 up to \$215 per aircraft; and

1           WHEREAS these regulations were adopted to assist the U.S. Customs  
2 Service in identifying aircraft suspected of carrying illegal drugs across  
3 these zones; and

4           WHEREAS there has been no documented case in Alaska involving a small  
5 aircraft entering an ADIZ or DEWIZ transporting illegal drugs; and

6           WHEREAS these regulations apply to tourists who visit Alaska by pri-  
7 vate plane; and

8           WHEREAS the International Cessna 170 Association has chosen to hold a  
9 convention in Fairbanks during July 1988 with an expected attendance of 100  
10 aircraft, most of which will be Cessna 170's ranging from 32 to 40 years  
11 old; and

12           WHEREAS these regulations will have a negative effect on the number of  
13 visitors coming to the state by private aircraft for the International  
14 Cessna 170 Association convention and for business and tourism purposes;  
15 and

16           WHEREAS the Federal Aviation Administration is presently considering  
17 proposals to redefine the Alaska ADIZ;

18           BE IT RESOLVED that the Alaska State Legislature respectfully requests  
19 the Federal Aviation Administration to either exempt aircraft flying within  
20 Alaska and between Alaska and the other states from 14 CFR 45.11(a) and (d)  
21 and 14 CFR 45.29(h) or grant an exemption from these regulations to partic-  
22 ipants in the International Cessna 170 Association convention; and be it

23           FURTHER RESOLVED that the Alaska State Legislature respectfully re-  
24 quests the Federal Aviation Administration to exempt aircraft flying be-  
25 tween points in Alaska from these regulations when the boundaries of the  
26 Alaska Air Defense Identification Zone are redefined.

27           COPIES of this resolution shall be sent to the Honorable James H.  
28 Burnley IV, Secretary of Transportation; the Honorable T. Allan McArtor,  
29 Administrator of the Federal Aviation Administration; and to the Honorable

1 Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the  
2 Honorable Don Young, U.S. Representative, members of the Alaska delegation  
3 in Congress.  
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*Steve, we ought to include this*

1 FURTHER RESOLVED that the Alaska State Legislature respectfully re-  
2 quests the Federal Aviation Administration to authorize the Alaska Region  
3 of the Federal Aviation Administration to grant temporary relief from the  
4 regulation requiring 12-inch registration numbers to those pilots who  
5 penetrate the current Alaska Air Defense Identification Zone until the new  
6 description of the Alaska Air Defense Identification Zone is adopted.

7 COPIES of this resolution shall be sent to the Honorable James H.  
8 Burnley IV, Secretary of Transportation; to the Honorable T. Allan McArtor,  
9 Administrator of the Federal Aviation Administration; and to the Honorable  
10 Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the  
11 Honorable Don Young, U.S. Representative, members of the Alaska delegation  
12 in Congress.

Original sponsors: Frank, Adams,  
Miller, et al.

1 IN THE HOUSE

BY THE TRANSPORTATION COMMITTEE

2 CS FOR HOUSE JOINT RESOLUTION NO. 46 (Transportation)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - SECOND SESSION

5 Requesting the Federal Aviation Adminis-  
6 tration to exempt aircraft in Alaska  
7 from regulations on the size of aircraft  
8 registration numbers and on supplemental  
9 identification plates.

10 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

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14 WHEREAS federal regulations are sometimes not relevant to Alaska and  
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16 WHEREAS the Federal Aviation Administration has adopted regulations  
17 that require 12-inch registration numbers on aircraft entering or leaving  
18 an Air Defense Identification Zone (ADIZ) or a Distant Early Warning Iuen-  
19 tification Zone (DEWIZ) and a supplemental identification plate on the  
20 exterior of aircraft; and

21 WHEREAS some parts of Alaska are included within an ADIZ or DEWIZ and  
22 other parts are not, and thus those aircraft that fly in and out of these  
23 zones must display 12-inch registration numbers, but those aircraft that  
24 never enter or leave one of these zones may continue to display three-inch  
25 registration numbers; and

26 WHEREAS it is nearly impossible to predict whether an aircraft in  
27 Alaska will ever need to enter or leave an ADIZ or DEWIZ; and

28 WHEREAS compliance with these regulations imposes an estimated cost of  
29 up to \$215 per aircraft; and

1           WHEREAS these regulations were adopted to assist the U.S. Customs  
2 Service in identifying aircraft suspected of carrying illegal drugs across  
3 these zones; and

4           WHEREAS there has been no documented case in Alaska involving a small  
5 aircraft entering an ADIZ or DEWIZ transporting illegal drugs; and

6           WHEREAS these regulations apply to tourists who visit Alaska by pri-  
7 vate plane; and

8           WHEREAS the International Cessna 170 Association has chosen to hold a  
9 convention in Fairbanks during July 1988 with an expected attendance of 100  
10 aircraft, most of which will be Cessna 170's ranging from 32 to 40 years  
11 old; and

12           WHEREAS these regulations will have a negative effect on the number of  
13 visitors coming to the state by private aircraft for the International  
14 Cessna 170 Association convention and for business and tourism purposes;  
15 and

16           WHEREAS the Federal Aviation Administration is presently considering  
17 proposals to redefine the Alaska ADIZ;

18           BE IT RESOLVED that the Alaska State Legislature respectfully requests  
19 the Federal Aviation Administration to authorize the Alaska Region of the  
20 Federal Aviation Administration to grant temporary relief from the regu-  
21 lation requiring 12-inch registration numbers to those pilots who penetrate  
22 the current Alaska Air Defense Identification Zone until the new descrip-  
23 tion of the Alaska Air Defense Identification Zone is adopted; and be it

24           FURTHER RESOLVED that the Alaska State Legislature respectfully re-  
25 quests the Federal Aviation Administration to exempt aircraft flying within  
26 Alaska and between Alaska and the other states from 14 CFR 45.11(a) and (d)  
27 and 14 CFR 45.29(h) and grant an exemption from these regulations to  
28 participants in the International Cessna 170 Association convention; and be  
29 it



1           FURTHER RESOLVED that the Alaska State Legislature respectfully re-  
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7           Administrator of the Federal Aviation Administration; and to the Honorable  
8           Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the  
9           Honorable Don Young, U.S. Representative, members of the Alaska delegation  
10          in Congress.

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BY HALFORD, BINKLEY, FAIKS, ABOOD,  
FANNING, COGHILL, FAHRENKAMP,  
STURGULEWSKI, FISCHER, JOSEPHSON,  
DUNCAN AND HENSLEY

1 IN THE SENATE

2 SENATE JOINT RESOLUTION NO. 56

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - SECOND SESSION

5 Requesting the Federal Aviation Adminis-  
6 tration to redescribe the Air Defense  
7 Identification Zones north of the con-  
8 tiguous 48 states of the United States.

9 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 WHEREAS the Federal Aviation Administration has adopted regulations  
11 that require 12-inch registration numbers on aircraft penetrating an Air  
12 Defense Identification Zone (ADIZ) or a Distant Early Warning Identifica-  
13 tion Zone (DEWIZ); and

14 WHEREAS these regulations were adopted to assist the U.S. Customs  
15 Service in identifying aircraft suspected of carrying illegal drugs across  
16 these zones; and

17 WHEREAS there has been no documented case in Alaska involving a small  
18 aircraft entering an ADIZ or DEWIZ transporting illegal drugs; and

19 WHEREAS these regulations will have a negative effect on the number of  
20 individuals coming to Alaska by private aircraft for business and tourism  
21 purposes, for example, the International Cessna 170 Association convention  
22 in Fairbanks;

23 BE IT RESOLVED that the Alaska State Legislature respectfully requests  
24 the Federal Aviation Administration to proceed in the most expeditious  
25 manner with the redescription of the Alaska Air Defense Identification Zone  
26 and other Air Defense Identification Zones north of the contiguous 48  
27 states of the United States in order to eliminate the requirement that  
28 aircraft flying in Alaska and between Alaska and the other states penetrate  
29 these zones; and be it

1           FURTHER RESOLVED that the Alaska State Legislature respectfully re-  
2           quests the Federal Aviation Administration to authorize the Alaska Region  
3           of the Federal Aviation Administration to grant temporary relief from the  
4           regulation requiring 12-inch registration numbers to those pilots who  
5           penetrate the current Alaska Air Defense Identification Zone until the new  
6           description of the Alaska Air Defense Identification Zone is adopted.

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11          Honorable Don Young, U.S. Representative, members of the Alaska delegation  
12          in Congress.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 43, 45, and 91

[Docket No. 25033; Amendment Nos. 43-29, 45-17, and 91-206]

Aircraft Identification and Retention of Fuel System Modification Records

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This final rule amends the Federal Aviation Regulations to require: (1) that 12-inch high nationality and registration marks be displayed on all aircraft that penetrate an Air Defense Identification Zone or a Defense Early Warning Identification Zone; (2) that a civil aircraft identification data plate be displayed on the exterior surface of each U.S.-registered aircraft; and (3) that a copy of the form which authorizes the alteration of an aircraft with fuel tanks within the passenger or a baggage compartment be kept on board the modified aircraft.

These amendments are necessary because of the increased dangers to civil aviation resulting from the major increase in illegal drug importations into the United States by air. They are intended to expand the effectiveness of narcotic interdiction and, thereby, provide for improvement in safety of civil aviation operations, while at the same time reducing the flow of drugs by air into the United States.

EFFECTIVE DATE: December 8, 1987.

FOR FURTHER INFORMATION CONTACT:

Joseph J. Gwiazdowski, Aircraft Manufacturing Division (AWS-200), Office of Airworthiness, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267-9541.

SUPPLEMENTARY INFORMATION:

Background

Although the Federal Aviation Administration (FAA) does not enforce the anti-drug smuggling and related criminal statutes, it is concerned with the hazards to air commerce in the United States arising from the use of aircraft to escape detection while importing illegal, contraband substances (narcotic drugs, marijuana, and depressant or stimulant drugs) into the United States. The hazards to air commerce have increased consistent with the growing number of pilots who are willing to risk the carriage of these illegal goods despite escalating law enforcement activities. The U.S.

Customs Service (Customs) reports that the vast majority of illegal drug trafficking by air into the United States passes through an Air Defense Identification Zone (ADIZ) or Defense Early Warning Identification Zone (DEWIZ). The means for detection of these aircraft include low altitude radar, law enforcement pursuit aircraft, and advanced police techniques. Those pilots committed to evading detection by pursuit aircraft may engage in extremely dangerous flight techniques, such as very low flight to avoid radar; landing and taking off from unprepared landing areas; operation without lights; and operation in weather conditions beyond the capability and/or qualifications of the aircraft or pilot. These flight techniques create a safety hazard for all other aircraft in the area and for persons and property on the ground. Additionally, many of the aircraft used for such operations have been equipped with extended-range fuel tanks which are not installed in accordance with the Federal Aviation Regulations (FAR), posing an additional safety hazard. Thus, while other agencies are responsible for criminal law enforcement concerning illegal substances (narcotic drugs, marijuana, and depressant or stimulant drugs), the hazardous aeronautical activities of pilots engaged in smuggling and the potential increase in volume of these substances into the United States pose a direct threat to air commerce. This threat was a basis for the FAA adopting § 91.12 of the FAR, which provides that no person may operate a civil aircraft within the United States with knowledge that narcotic drugs, marijuana, and depressant or stimulant drugs are carried in the aircraft, unless authorized under Federal or State law. During several meetings, the FAA and Customs representatives focused on actions required to develop more effective means to reconcile specific drug enforcement problems involving aircraft. In a July 11, 1985, letter to the FAA, the Assistant Secretary of the Department of Treasury outlined and proposed the specific regulatory amendments which Customs considered to be necessary to assist it in curbing use of aircraft carrying illegal substances and to identify those aircraft which may be used for drug smuggling. Customs believes that their proposed amendments represent a significant step toward curbing the use of aircraft for drug smuggling. The proposed amendments are based on the increase of illegal drug importation by aircraft and on the value to law enforcement officials of positive identification of all aircraft including those aircraft which

may be involved in such activities. The problems identified by Customs include:

1. Positive air-to-air identification of aircraft penetrating an ADIZ or DEWIZ is hindered by the difficult-to-read 3-inch identification marks displayed on some of these aircraft;
2. Aircraft with identification (I.D.) plates which cannot readily be seen hamper the prompt identification of stolen or falsely numbered aircraft; and
3. Inability to readily verify unapproved aircraft modifications involving unauthorized fuel tanks in the passenger compartment or a baggage compartment because the records for approved aircraft modifications are not required to be kept aboard the aircraft.

On July 3, 1986, the FAA issued Notice of Proposed Rulemaking (NPRM) No. 86-9 (51 FR 25174; July 10, 1986) proposing responses to these three problems raised by Customs.

Registration Numbers

As discussed in the notice, Customs and other law enforcement groups, in combating drug trafficking by air, frequently must attempt to identify, from a high-performance aircraft, a small low-performance aircraft including aircraft suspected of being used in the illegal activity. Often these operations must be performed at night using special devices and capabilities to enhance identification and to apprehend smugglers. Many of the suspected aircraft have small, 3-inch nationality and registration marks (N-numbers) which are difficult to see or detect when attempting air-to-air identification. This requires maneuvering relatively close to these aircraft so that positive identification can be made. The use of larger registration marks makes identification easier and results in safer operation by maintaining a larger (up to six times greater) separation between the aircraft.

Customs has found that many aircraft flying into the United States display the small, 3-inch marks, making it difficult to identify aircraft, including suspect aircraft. The vast majority of the suspected aircraft, which are not limited to a particular type of aircraft, pass through an ADIZ or DEWIZ prior to entering the United States. It is these aircraft for which Customs, or other law enforcement or military organizations, are likely to attempt air-to-air identification.

Identification Plates

The FAA has adopted several related amendments concerning I.D. plates based on the needs and comments of the aviation community. Section 45.11 of the

FAR was changed by Amendment 45-3 (52 FR 187; January 10, 1987) to require the I.D. plate to be in an accessible location "near an entrance," not necessarily an *external* location, to allow for maximum I.D. plate protection and to facilitate normal aircraft inspection. Based on information presented by small aircraft manufacturers, the FAA again changed § 45.11 of the FAR by adopting Amendment 45-7 (33 FR 14402; September 25, 1968) to provide an optional location for an aircraft I.D. plate. Under this option, the I.D. plate may be affixed permanently on the exterior of the fuselage near the tail surfaces, if it is legible to an observer on the ground. Additionally, FAA Advisory Circular AC 45-2, Identification and Registration Markings, which provides guidance and information concerning the identification and marking requirements for aircraft, includes a provision that, if under certain conditions the I.D. plate had to be covered or enclosed in any manner, its accessibility is considered acceptable if it can be revealed without the use of tools.

The Customs Service indicates that when investigating aircraft, including those suspected of being used for smuggling, it is difficult to determine quickly whether the FAA assigned N-number is displayed appropriately on the aircraft. Furthermore, false numbers may be used on stolen aircraft, which frequently are used for smuggling. Cross-checking the N-number with the I.D. plate data, which is an integral part of identification for the aircraft, assists in determining whether the N-number is false. The I.D. plates for many aircraft, however, are located in the aircraft interior so that they cannot be read from outside the aircraft, making it difficult for investigators to make an on-the-spot check of a suspected aircraft. Customs contends that the repositioning of existing I.D. plates, or placement of another I.D. plate on the exterior of the aircraft near the main entrance, would enable investigators to compare quickly the serial number with the N-number to help determine whether suspect aircraft have been stolen or the N-numbers falsified.

#### Additional Fuel Tank Installation

The FARs prescribe requirements for the approval of major alterations to aircraft type designs, which include such installations as additional fuel tanks in an aircraft. The FARs also prescribe recordkeeping requirements for such approvals. Most fuel tank installations performed on aircraft operating under Part 91 require an appropriate approval

for the type design change and recording of the completion of the modification on FAA Form 337. Those aircraft operated under Part 121, 127, and 135 of the FARs may have additional fuel tanks installed in accordance with applicable requirements, of the particular continuous airworthiness program and prepare the documentation for the alteration other than an FAA Form 337, in accordance with the continuous airworthiness program.

Customs reports that aircraft used to smuggle drugs are often modified with fuel tanks which are installed in the passenger or a baggage compartment and which are not authorized by the FAA. These fuel tanks are installed to permit the aircraft to make long unrefueled flights, such as from the United States to South America. This long-range unrefueled capability adds to the difficulty in pursuing suspected aircraft. These unauthorized, usually haphazard, fuel tank installations create a safety hazard because there is no assurance that they meet the safety standards established by the FAA.

One problem with attempting to identify the unauthorized extended-range fuel tank installation is that it is difficult to check, on the spot, whether the tanks have been installed in accordance with FAA requirements. The FAR type certification procedures require FAA approval for any changes to type design of a U.S. civil aircraft, such as modifications to install extended-range fuel tanks. Documentation evidencing such approval may vary depending upon the nature of the change to the aircraft's type design.

One way that approval can be evidenced is for an authorized person performing the work to execute an FAA Form 337 in accordance with Appendix B of Part 43 of the FAR. However, there is currently no requirement for records of such authorization to be on board the aircraft. Customs contends that a regulation requiring an FAA Form 337 to be aboard the aircraft when extended-range fuel tanks are installed within the passenger or a baggage compartment would assist Customs in concentrating interdiction efforts on suspicious aircraft not authorized to have such installations. Customs investigators can make an on-the-spot check of the suspected aircraft's FAA Form 337. In addition, this action would assist the FAA in identifying aircraft with unauthorized fuel tanks, and thus avoid a potential hazard to the aviation community and the public.

#### Participation in Rulemaking

Notice No. 86-9 gave interested persons an opportunity to participate in amending these rules. Due consideration was given to all information submitted by the commenters. Except as discussed in this preamble, the revisions adopted by these amendments and the reasons for them are the same as those in Notice No. 86-9.

#### Discussion of Amendments

The FAA has determined that the amendments proposed in Notice No. 86-9 should be adopted. The comments received in response to the notice are discussed below.

##### *A. Improve Identification of Aircraft Penetrating the ADIZ and DEWIZ—§§ 45.21 and 45.29*

This amendment requires that all aircraft penetrating the ADIZ or DEWIZ display 12-inch markings. However, if any surface authorized to be marked is not large enough for full-size marks, marks as large as practicable shall be placed on the largest of the authorized surfaces in accordance with § 45.29(f).

To ease the burden on owners of affected aircraft which penetrate the defense zones, under the provision of § 45.21(d), this amendment permits the 12-inch markings to be temporary on those "grandfathered" aircraft and certain aircraft which are currently authorized to operate with small markings as specified in § 45.29(b). Moreover, to avoid any burden due to downtime, ferrying, or loss of revenue associated with marking the affected aircraft, a 90-day period is allowed for compliance.

Adoption of this amendment provides for the improvement in safety associated with air-to-air identification of *all* aircraft which penetrate the ADIZ or DEWIZ. It has no impact on the majority of other aircraft operators since most aircraft currently displaying marks less than 12 inches high under Part 45 do not penetrate these zones and thus pose no problem at this time. Those aircraft with smaller marks operating solely within one of these zones, e.g., the Alaska DEWIZ or ADIZ, also will not be affected if they do not depart and reenter (penetrate) the zone.

##### *B. Change I.D. Plate Location—§ 45.11*

This amendment requires that all aircraft display an I.D. plate, as specified by § 45.11(a), on the aircraft fuselage exterior surface, in a location legible to an observer on the ground. It must be located adjacent to and aft of the rear-most entrance door or on the exterior surface near the tail. An aircraft

I.D. plate affixed in an easily accessible area, legible to an observer on the ground, facilitates verification of aircraft identification by FAA inspectors, Customs investigators, and other law enforcement officials. The amendment provides for ready access to the I.D. plate data without having to enter the aircraft. It makes the I.D. plate information and N-number available simultaneously to provide a cross reference to help determine whether the aircraft may have been stolen or to determine if the registration number has been falsified. It also facilitates FAA inspectors' identification of aircraft for verification of maintenance, modification, and other airworthiness requirements to assure safe aircraft operation.

This amendment is not retroactive since this could result in a major change which would pose an undue burden on many aircraft owners. For example, if the I.D. plates currently affixed to aircraft, as required, were to be removed (i.e., repositioned) from the existing locations, this could result in damage to the aircraft and I.D. plate, and might require burdensome engineering and manufacturing changes such as structural, interior or exterior repair, or repainting.

As a cost-saving alternative for aircraft manufactured prior to 90 days after the effective date of this amendment, this final rule allows the display of just the model designation and builder's serial number on the fuselage exterior, adjacent to and aft of the rear-most entrance. This may be done if the identification plate is secured at an accessible exterior or interior location near an entrance. The model designation and serial number are required to be affixed in such a manner that they are not likely to be defaced or removed during normal service. Unlike the required fireproof I.D. plate, this "supplemental" identification does not have to be affixed in a manner such that it is not likely to be lost or destroyed in an accident. Thus, the data may be affixed in a relatively low-cost manner, such as by painting or decal.

**C. Illegal Fuel Tank Installation—Part 43, Appendix B(a) and (d); § 91.27(c); and § 91.173(a) and (d)**

This amendment requires that all affected aircraft modified with additional fuel tanks in the passenger or a baggage compartment, under Part 43 of the FAR, physically have on board the aircraft a copy of the required FAA Form 337. This includes aircraft previously not required to have an FAA Form 337 for fuel tank installations

when operating with a special flight permit for the purpose of delivery or export. This amendment also requires that the owner or operator of an aircraft with such fuel tanks present the FAA Form 337 for inspection by any law enforcement officer.

This amendment provides one means for FAA, Customs, and other investigators to quickly obtain evidence as to whether the additional tanks in the aircraft are authorized or possibly illegally installed. Enforcement action can then be taken by the FAA and the appropriate agency against persons operating such aircraft. Action can also be taken to prevent the aircraft from being flown. This rule makes it possible for Customs to concentrate interdiction efforts on those aircraft modified with unauthorized fuel tank installations and which are possibly being used for illegal drug trafficking. By limiting this rule to aircraft modified with fuel tanks in the passenger or baggage compartments, which requires an FAA Form 337 under Part 43, operators of aircraft with FAA-approved extended-range fuel tanks located elsewhere in the aircraft (e.g., wing tip tanks) would not be required to keep that authorization on board the aircraft.

**Discussion of Comments**

**General**

Eighty commenters, representing the views of the aviation community, participated in this rulemaking. Comments were submitted by individual pilots and owners and operators of aircraft including representatives of some aviation and aircraft manufacturers associations. Generally, the commenters support Customs' objective to stop the flow of illegal drugs into the United States by air. However, most commenters disagree as to what amendments should be adopted and who should comply with them. Some commenters disagree with all the amendments or recommend proposals which are outside the scope of the NPRM. The majority of the commenters address the proposed amendments separately and give reasons which oppose a particular issue and either concur in or withhold comments on the other issues.

The comments from aviation association representatives on the amendments also range from full support as noted by the Airline Pilots Association (ALPA) to "no merit" as the Aircraft Owners and Pilots Association (AOPA) contends. Many commenters contend that the FAA action will not stop drug trafficking and question the value of these amendments. They

contend that there are more effective ways to stop drug smugglers such as direct legislation against smugglers. The commenters, however, fail to recognize or acknowledge that the FAA action proposed in Notice No. 86-9 is only a part of the total U.S. Government ongoing effort to actively suppress drug smuggling, which includes law enforcement agencies efforts of other Departments such as the Treasury, Justice, and Defense. These initiatives carry out the mandates of Congress, such as the Anti-Drug Abuse Act (Pub. L. 99-570, October 27, 1986).

The pertinent comments and commenters' recommendations concerning each amendment are discussed in the following paragraphs. In addition, comments concerning the time and cost of compliance are discussed separately.

**Registration Numbers**

The majority of commenters object to the requirement for displaying 12-inch N-numbers on certain aircraft that penetrate an ADIZ or DEWIZ. The commenters contend that the amendment imposes unnecessary costs on owners and operators of aircraft allowed to display smaller N-numbers under § 45.29(b), with no benefit to legitimate operators who must pay for an ineffective law which drug smugglers can easily circumvent with temporary and false markings. Also, operators of some aircraft such as experimental amateur-built, rotorcraft, gliders, airships, and balloons feel that this amendment should be limited to twin-engine, fixed-wing aircraft.

The FAA disagrees because, as stated in the notice, there is an urgent need for positive identification of *all aircraft* that penetrate the defense zones, regardless of size and configuration. However, it should be noted that this amendment only affects those aircraft that display the ineffective small N-numbers and penetrate the ADIZ or DEWIZ. Additionally, to avoid unnecessary costs to operators of the affected aircraft, a 90-day time period is provided for compliance. This provides for sufficient time in which the temporary or permanent 12-inch N-numbers can be affixed to aircraft affected.

A few commenters questioned why all aircraft operating in Alaska must display 12-inch marks since Alaska lies entirely within an ADIZ while aircraft in the contiguous United States may display small N-numbers. However, the rule applies to those aircraft that *penetrate* the ADIZ or DEWIZ. Accordingly, aircraft allowed to display small N-numbers in accordance with

regulations, whether in the United States or elsewhere, must affix 12-inch N-numbers only if they are going to penetrate an ADIZ or DFWIZ. Thus, aircraft operating solely within the State of Alaska will not be required to display 12 inch N-numbers unless they depart on and reenter the ADIZ.

Some commenters contend that the amendment penalizes legitimate aircraft operators while drug smugglers can easily circumvent or violate the regulation. The FAA disagrees because most aircraft operators are required to display 12-inch N-numbers under Part 45. Further, the FAA, in conjunction with other law enforcement agencies, aggressively investigates and takes appropriate action on incidents involving violations of the FAR. Furthermore, under the new Anti-Drug Abuse Act, increased civil and criminal penalties may be imposed on aircraft operators involved in drug smuggling. These penalties range up to \$250,000 and 20 years in prison and include the seizure and forfeiture of the aircraft. The amendments to §§ 45.21 and 45.29 have been adopted as proposed.

#### *Identification Data Plates*

With regard to the exterior location of I.D. plates and/or data, most commenters contend generally that this amendment is ineffective, impractical, or redundant. A majority of the commenters contend that the amendments would be ineffective because the rule can be easily circumvented by falsifying the data on the exterior surface of the aircraft. The FAA does not agree since the FAA penalties and the more recent legislation, cited previously, are expected to deter such violations.

Some commenters maintain that the rule is impractical because repositioning the existing I.D. plates or affixing a second I.D. plate could damage the aircraft, especially those covered with fabric. The FAA does not agree since the rule does not require repositioning of the original I.D. plates, which conceivably could result in damage to the aircraft. Also, both old and new aircraft can have I.D. plates affixed on the exterior surface, as required, without damaging even fabric-covered aircraft.

Some commenters claim that I.D. plates affixed to the exterior surface of large aircraft would be too high to read by an observer on the ground. Others argue that there is no need to change the I.D. plate location on some rotorcraft, open cockpit aircraft, and balloons where the required I.D. plate can be viewed by an observer outside the aircraft.

However, although I.D. plates can be viewed from the outside of some aircraft, the FAA has determined that I.D. plates in a *standard* location on the exterior surface adjacent to and aft of the rear-most entrance door of an aircraft provides for quick access to the I.D. information, in addition to precluding the need to gain access to the inside of an aircraft.

With regard to the redundant data, commenters contend that there is no need to affix the same data in two places on the same aircraft, therefore, the status quo should be maintained or the NPRM withdrawn.

The FAA disagrees because the I.D. information which is secured inside an aircraft cannot be obtained readily, as some contend, without gaining access to the aircraft. The FAA has determined that the standard exterior location is the most effective location for I.D. plates and/or data. A standard location provides quick access to the identification data with the least impact on the aviation community since most aircraft owners and operators already comply with that requirement, while others can mark their aircraft inexpensively as discussed in Notice No. 86-9.

#### *Additional Fuel Tank Installations*

The majority of commenters responding to this amendment agreed with the requirement to have the completed FAA Form 337 aboard an aircraft modified in accordance with Part 43 with fuel tanks in the passenger or baggage compartments. Those opposed contend that the amendment imposes an unnecessary burden on operators of aircraft that may be modified with fuel tanks in accordance with regulations which do not require the use of an FAA Form 337 for documenting major alternations. Accordingly, they maintain that the rule should exempt operators under Parts 121, 127, or 135, as applicable.

The FAA considered the regulations governing aircraft modified under other applicable provisions. However, approved documentation under a continuous airworthiness maintenance program may not be as suitable for carriage on an aircraft as the FAA Form 337. For that reason, the proposed amendment applied only to aircraft modified pursuant to part 43 with fuel tanks installed in the passenger or baggage compartments. This amendment adopts that proposal. The new rule does not require documentation for aircraft modified under other provisions of the FAR.

Some commenters state that the FAA Form 337 can be easily falsified or that

an approved installation could be used by a smuggler and that, either way, the amendment has little value. The FAA does not agree since violations of the applicable regulations, such as unapproved equipment installations, are vigorously pursued and enforced by the FAA to maintain safety in air operations. In addition, Customs considers this amendment to be a significant step toward curbing the use of aircraft for drug smuggling.

#### *Time for Compliance*

Some commenters object that the proposal does not provide sufficient time for compliance and that this creates an undue burden on owners and operators because of the requirements for ferrying and downtime. The FAA agrees with these commenters. It was planned to allow a period of 90 days after the effective date for compliance with the requirements for the display of 12-inch N-numbers and for the affixing of I.D. plate and/or data. In the NPRM, however, the "October 8, 1986" date was published in error apparently by using the published date of July 10, 1986, as the start of the 90-day period. A correction is made to allow sufficient time for compliance.

To preclude an undue burden on aircraft owners and operators, the 90-day period provides time for appropriate N-numbers and the I.D. plate and/or data to be affixed. The delayed compliance time only applies to the requirements for the display of 12-inch N-numbers and the I.D. plate and/or data. The display of temporary 12-inch markings is permitted for N-numbers, as appropriate, and the method for affixing data plate information on the exterior surface of an aircraft is purposely undefined to allow for economic alternatives, such as painting or decals.

#### *Cost of Compliance*

The majority of commenters object to the cost that would be imposed by the proposed 12-inch N-numbers and I.D. plate amendments. They contend that the cost of compliance estimates are too low. In addition, the commenters indicate that the FAA cost estimates do not reflect a loss of revenue caused by ferrying and downtime.

The FAA disagrees with the commenters that its cost estimates are too low. The FAA believes its cost estimates to be a good indicator of what aircraft operators/owners impacted would, on the average, incur. Moreover, after careful examination of the comments received on NPRM No. 86-9, it has become apparent to the FAA that the majority of the commenters

apparently failed to consider the FAA assumptions noted in the NPRM or as detailed in the draft regulatory evaluation in the docket. This evaluation fully explains how the cost of compliance estimates, which range between \$100 and \$215, were derived and contains a number of assumptions on which these cost estimates are based. Briefly, some of these assumptions are based on the fact that only those aircraft displaying small N-numbers under § 45.29, which includes aircraft "grandfathered" by Amendments 45-13 and 45-15, would be impacted by the 12-inch N-numbers requirement when penetrating the ADIZ or DEWIZ. It is further assumed that all operators of those "grandfathered" aircraft will be required to display 12-inch N-numbers only 1 or 2 years sooner than they otherwise would be required because of repainting, restoring, or changing the marks. Therefore, the FAA evaluation accurately reflects only that small portion of the estimated \$550 cost of displaying 12-inch N-numbers. The net result is that this rule will impact very few aircraft since most aircraft would switch to permanent 12-inch N-numbers in that period.

The cost of compliance for the I.D. plate amendment assumes that this data information would be painted on the designated exterior of all existing impacted aircraft for about \$100 based on conversations between FAA and fixed base operators.

With regard to downtime and ferrying, the FAA allows impacted aircraft operators and owners a period of 90 days after the effective date of the final rule to come into compliance. This period of 90 days provides sufficient time for impacted operators and owners to comply with the rule without incurring additional costs attributed to downtime and ferrying. The intent of the FAA has always been to allow a reasonable period of time for impacted parties to comply with the rule. It has always been the policy of the FAA *not* to impose undue cost burdens on parties impacted by its regulatory efforts.

#### Summary of Comments

Most commenters oppose the adoption of the amendments; however, they have neither provided sufficient justification for their positions nor shown that withdrawing Notice No. 86-9 is in the public interest. It appears that many commenters failed to consider the reasons for adopting the amendments provided in the NPRM. Many comments objected that they must comply with the amendments when, in fact, they are not affected. For example, their aircraft will not penetrate an ADIZ or DEWIZ, or the

I.D. plates are already affixed as required. The new requirement for the appropriate FAA Form 337 to be aboard aircraft modified with certain fuel tanks under Part 43 is favored by the majority of the commenters and poses no problem.

The FAA agrees with comments requesting that it clarify and correct errors. Therefore, the comments that the FAA is accepting, and which the final rule reflects, include an appropriate compliance date and editorial changes suggested to clarify the amendments as proposed. Also, in response to comments, the FAA has also reevaluated and clarified the cost impact where necessary.

#### Regulatory Evaluation Summary

The regulatory evaluation prepared for this rule examines the benefit and cost aspects of the establishment of identification, registration marking and recording of major repair requirements that impact general aviation aircraft. The rule includes amendments to Parts 43, 45, and 91 of the FAR, which respond to the Department or Treasury's request for the following:

1. That, 90 days after the effective date of this rule, 12-inch high nationality and registration marks (N-numbers) must be displayed on aircraft that penetrate an ADIZ or a DEWIZ;
2. That, 90 days after the effective date of this rule, a civil aircraft identification (I.D.) plate or its information must be displayed in a legible area on the fuselage exterior of an aircraft either adjacent to and aft of the rear-most entrance, or on the fuselage near the tail surfaces; and
3. That, after the effective date of this rule, a copy of the FAA Form 337 completed upon installation of fuel tanks installed within the passenger compartment or a baggage compartment under Part 43 of the FAR be kept in the aircraft by the owner or operator.

#### Costs

Estimates of the cost of compliance with the amendments to Parts 43, 45, and 91 have been developed by the FAA. Cost estimates were obtained primarily from civil aircraft manufacturers and fixed based operators.

This evaluation estimates that the one-time cost of compliance associated with the amendments to § 45.11 (I.D. plate amendment) and § 45.29 (12-inch N-number amendment) are expected to range between \$7 million and \$8 million (present discounted value of cost at 10 percent, 1987). The amendment to § 45.11 will impact an estimated 79,300

to 82,000 fixed-wing aircraft, rotorcraft, and other types of affected civil aircraft (blimps, balloons, and gliders) at a cost of \$100 each. Moreover, the amendment to § 45.29 will affect an estimated 3,900 to 13,500 fixed-wing aircraft and rotorcraft at a cost of \$55 to \$115 each, respectively. Collectively, the cost of compliance will range between \$100 and \$215 per aircraft (1985 dollars). Conversely, the amendments to Appendix B of Part 43 (Recording of Major Repairs and Major Alterations), § 91.27 (Civil Aircraft: Certifications Required), and § 91.173 (Maintenance Records) are estimated to impose no additional cost. Under this amendment, this form is filled out in triplicate, rather than duplicate, to provide for a copy to be kept on board an aircraft modified with a fuel tank in the passenger compartment or a baggage compartment. In addition, the amendment to § 45.21 (General) is estimated to impose no additional cost to owners and operators of aircraft which may penetrate a defense zone because it merely provides for the option of using temporary or permanent 12-inch markings rather than an additional requirement.

#### Benefits

The anticipated benefits of the amendments include the following: (1) improved positive identification of those aircraft previously allowed to display small N-numbers when penetrating the ADIZ or DEWIZ; (2) improved verification of aircraft identification and enhanced ability of inspectors to determine noncompliance, such as whether a suspect aircraft had been stolen or the N-numbers falsified; and (3) increased effectiveness of Customs in concentrating interdiction efforts on suspicious aircraft not authorized to operate with fuel tanks installed in the passenger compartment or a baggage compartment. The FAA has been unable to quantitatively determine the extent to which Customs' drug interdiction efforts will be enhanced by this rule and resulting benefits. This difficulty is largely attributed to the fact that benefits of Customs' drug enforcement efforts represent a public good. This good does not subject itself to market evaluation. Thus, it is extremely difficult to evaluate these benefits in monetary terms. An indication of the potential benefits that could accrue from reduced drug abuse activity, due to enhanced drug interdiction, is shown in a 1984 report by the Research Triangle Institute. The report revealed that the economic cost to society of drug abuse amounts to approximately \$64 billion annually.



Safety benefits are also expected to accrue from this rule. These benefits are related to the lowering of fatalities and serious injuries associated with operation of civil aircraft in active drug trafficking areas. A review of the National Transportation Safety Board's data base for drug-related accidents revealed that 127 fatalities and 33 serious injuries occurred between 1975 and 1984. During this period, these statistics equated to an annual average of 13 fatalities and 3 serious injuries related to drug trafficking activity. The rule is expected to have a positive impact on these grim statistics, though to what extent is not known by the FAA.

The regulatory evaluation that has been placed in the docket contains information in more detail related to costs and benefits that are expected to accrue from the implementation of this rule.

#### *Regulatory Flexibility Determination*

The FAA has determined that, under the criteria of the Regulatory Flexibility Act of 1980, the amendments contained in this rule are not expected to have a significant economic impact on a substantial number of small entities. The responsibility for marking or providing I.D. plate information on existing aircraft is placed directly on the owner or operator of the aircraft. However, for new aircraft, the I.D. plate responsibility is placed on the applicant for airworthiness certificate, usually the manufacturer. This amendment will impose no additional cost on manufacturers since it only requires that the I.D. plate be located on the exterior rather than interior of the aircraft. The majority of small entities impacted by this rule represent operators of unscheduled aircraft for hire. These operators are expected to incur a one-time compliance cost ranging between \$155 and \$215. These costs are far below the annualized threshold of significant regulatory cost of \$3,540. Therefore, this rule will not have a significant economic impact on a substantial number of small entities.

#### *International Trade Impact Statement*

All foreign and domestic manufactured aircraft sold in the United States need to be identified in accordance with the provisions of this rule. The cost of marking the aircraft is borne by individual domestic owners or operators only. This rule will not have an impact on trade opportunities for U.S. firms doing business overseas or for foreign firms doing business in the United States.

#### **Conclusion**

The amendments contained in this FAA document involve only the cost of affixing N-numbers or data to aircraft belonging to a minor part of the aviation community. The benefits are unquantifiable in that the amendment will enhance safety as well as assist Customs in its drug interdiction efforts as requested. The cost imposed on small entities are below the annualized threshold of significant regulatory costs. Therefore, I certify that under the criteria of the Regulatory Flexibility Act, these amendments do not have a significant economic impact, positive or negative, on a substantial number of small entities, and a regulatory flexibility analysis is not required. In addition, for the same reasons, the amendments do not involve a major rule under Executive Order 12291. Because it involves important DOT policy, the rule is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the regulatory evaluation for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT."

#### **List of Subjects**

##### *14 CFR Part 43*

Aircraft.

##### *14 CFR Part 45*

Nationality.

##### *14 CFR Part 91*

Aircraft, Airworthiness directives and standards.

#### **Adoption of the Amendments**

In consideration of the foregoing, Parts 43, 45, and 91 of the Federal Aviation Regulations (14 CFR Parts 43, 45, and 91) are amended as follows:

#### **PART 43—MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION**

1. The authority citation for Part 43 continues to read as follows:

Authority: 49 U.S.C. 1354, 1421 through 1430; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983).

2. Appendix B is amended by revising the introductory text of paragraph (a) and adding a new paragraph (d) to read as follows:

#### **Appendix B—Recording of Major Repairs and Major Alterations**

(a) Except as provided in paragraphs (b), (c), and (d) of this appendix, each person

performing a major repair or major alteration shall—

(d) For extended-range fuel tanks installed within the passenger compartment or a baggage compartment, the person who performs the work and the person authorized to approve the work by § 43.7 of this part shall execute an FAA Form 337 in at least triplicate. One (1) copy of the FAA Form 337 shall be placed on board the aircraft as specified in § 91.173 of this chapter. The remaining forms shall be distributed as required by paragraph (a) (2) and (3) or (c) (1) and (2) of this paragraph as appropriate.

#### **PART 45—IDENTIFICATION AND REGISTRATION MARKING**

3. The authority citation for Part 45 continues to read as follows:

Authority: 49 U.S.C. 1348, 1354, 1401, 1402, 1421, 1423, and 1522; 49 U.S.C. 106(g) (Revised, Pub. L. 97-449, January 12, 1983).

4. Section 45.11 is amended by revising paragraph (a) and adding a new paragraph (d) to read as follows:

#### **§ 45.11 General.**

(a) *Aircraft and aircraft engines.* Aircraft covered under § 21.182 of this chapter must be identified, and each person who manufactures an aircraft engine under a type or production certificate shall identify that engine, by means of a fireproof plate that has the information specified in § 45.13 of this part marked on it by etching, stamping, engraving, or other approved method of fireproof marking. The identification plate for aircraft must be secured in such a manner that it will not likely be defaced or removed during normal service, or lost or destroyed in an accident. Except as provided in paragraphs (c) and (d) of this section, the aircraft identification plate must be secured to the aircraft fuselage exterior so that it is legible to a person on the ground, and must be either adjacent to and aft of the rear-most entrance door or on the fuselage surface near the tail surfaces. For aircraft engines, the identification plate must be affixed to the engine at an accessible location in such a manner that it will not likely be defaced or removed during normal service, or lost or destroyed in an accident.

(d) On aircraft manufactured before December 8, 1987, the identification plate required by paragraph (a) of this section may be secured at an accessible exterior or interior location near an entrance, if the model designation and builder's serial number are also displayed on the aircraft fuselage exterior. The model designation and

builder's serial number must be legible to a person on the ground and must be located either adjacent to and aft of the rear-most entrance door or on the fuselage near the tail surfaces. The model designation and builder's serial number must be displayed in such a manner that they are not likely to be defaced or removed during normal service.

5. Section 45.21 is amended by revising paragraph (d)(3) to read as follows:

§ 45.21 General.

(d) \* \* \*  
(3) It is marked temporarily to meet the requirements of § 45.22(c)(1) or § 45.29(h) of this part, or both.

6. Section 45.29 is amended by revising the introductory text of paragraph (b) and adding a new paragraph (h) to read as follows:

§ 45.29 Size of Marks.

(b) *Height.* Except as provided in paragraph (h) of this part, the nationality and registration marks must be of equal height and on—

(h) After December 8, 1987, each operator of an aircraft penetrating an ADIZ or DEWIZ shall display on that aircraft temporary or permanent nationality and registration marks at least 12 inches high.

**PART 91—GENERAL OPERATING AND FLIGHT RULES**

7. The authority citation for Part 91 continues to read as follows:

Authority: 49 U.S.C. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31, and 32(a) of the Convention on International Civil Aviation (81 S.A. 1180); 42 U.S.C. 4321 *et seq.*; E.O. 11514; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983).

8. Section 91.27 is amended by adding a new paragraph (c) to read as follows:

§ 91.27 Civil aircraft: Certifications required.

(c) No person may operate an aircraft with a fuel tank installed within the passenger compartment or a baggage compartment unless the installation was accomplished pursuant to Part 43 of this chapter, and a copy of FAA Form 337 authorizing that installation is on board the aircraft.

9. Section 91.173 is amended by revising paragraph (c) and adding a new paragraph (d) to read as follows:

§ 91.173 Maintenance records.

(c) The owner or operator shall make all maintenance records required to be kept by this section available for inspection by the Administrator or any authorized representative of the National Transportation Safety Board (NTSB). In addition, the owner or operator shall present the Form 337 described in paragraph (d) of this section for inspection upon request of any law enforcement officer.

(d) When a fuel tank is installed within the passenger compartment or a baggage compartment pursuant to Part 43, a copy of the FAA Form 337 shall be kept on board the modified aircraft by the owner or operator.

Issued in Washington, D.C., on September 1, 1987.

T. Allan McArtor,  
*Administrator.*

[FR Doc. 87-20606 Filed 9-8-87; 8:45 am]  
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## Federal Aviation Administration, DOT

§ 45.11

TABLE III—FRICTION

Altitude (feet)	Tolerance (feet)
0	±70
0	70
0	70
0	70
00	80
00	90
100	100
100	120
100	140
100	160
100	180
100	200

TABLE IV—PRESSURE-ALTITUDE DIFFERENCE

Pressure (inches of Hg)	Altitude difference (feet)
10	-1,727
10	-1,340
10	-863
10	-392
10	0
10	+531
10	+893
10	+974

Secs. 313, 314, and 601 through 610 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1355, and 1421 through 1430) and sec. (c), Dept. of Transportation Act (49 U.S.C. 855(c))

Amdt. 43-2, 30 FR 8262, June 28, 1965, as amended by Amdt. 43-7, 32 FR 7587, May 4, 1967; Amdt. 43-19, 43 FR 22639, May 25, 1978; Amdt. 43-23, 47 FR 41086, Sept. 16, 1982

## APPENDIX F—ATC TRANSPONDER TESTS AND INSPECTIONS

The ATC transponder tests required by § 91.177 of this chapter may be conducted using a bench check or portable test equipment and must meet the requirements prescribed in paragraphs (a) through (d) of this appendix. If portable test equipment with appropriate coupling to the aircraft antenna system is used, operate the test equipment at a nominal rate of 235 interrogations per second to avoid possible ATCRBS interference. An additional 3db loss is allowed to compensate for antenna coupling errors during receiver sensitivity measurements conducted in accordance with paragraph (c)(1) when using portable test equipment.

(a) For reply radio frequently, interrogate the transponder and verify that the reply frequency of the system is  $1090 \pm 3$  MHz.

(b) Suppression: When the transponder is interrogated on mode 3/A at an interrogation rate between 230 and 1000 interrogations per second for class 1B and 2B transponders or between 230 and 1200 interrogations per second for class 1A and 2A transponders:

(1) Verify that the transponder does not respond to more than 1 percent of the interrogations when the amplitude of P<sub>1</sub> pulse is equal to the P<sub>2</sub> pulse.

(2) Verify that the transponder replies to at least 90 percent of the interrogations when the amplitude of the P<sub>1</sub> pulse is 9db less than the P<sub>2</sub> pulse.

If the test is conducted with a radiated test signal, the interrogation rate shall be  $335 \pm 5$  interrogations per second unless a higher rate has been approved for the test equipment used at that location.

(c) Receiver sensitivity:

(1) Verify that receiver sensitivity of the system is  $-73 \pm 4$ dbm by use of a test set—

(i) Connected to the antenna end of the transmission line;

(ii) Connected to the antenna terminal of the transponder with a correction for transmission line loss; or

(iii) Utilizing a radiated signal.

(2) Verify that the difference in mode 3/A and mode C receiver sensitivity does not exceed 1db.

(d) Records:

Comply with the provisions of § 43.9 of this chapter as to content, form, and disposition of the records.

(Secs. 313, 314, and 601 through 610 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1355, and 1421 through 1430) and sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1555(c)))

[Amdt. No. 43-18, 38 FR 35442, Dec. 28, 1973, as amended by Amdt. 43-19, 43 FR 22639, May 25, 1978]

## PART 45—IDENTIFICATION AND REGISTRATION MARKING

SPECIAL FEDERAL AVIATION REGULATION No. 27 (NOTE)

## Subpart A—General

Sec.

45.1 Applicability.

## Subpart B—Identification of Aircraft and Related Products

45.11 General.

45.13 Identification data.

45.14 Identification of critical components.

45.15 Replacement and modification parts.

Sec.

Subpart C—Nationality and Registration Marks

45.21 General.

45.22 Ex 'bition, antique, and other aircraft; special rules.

45.23 Display of marks; general.

45.25 Location of marks on fixed-wing aircraft.

45.27 Location of marks; nonfixed-wing aircraft.

45.29 Size of marks.

45.31 Marking of export aircraft.

45.33 Sale of aircraft; removal of marks.

AUTHORITY: 49 U.S.C. 1348, 1354, 1401, 1402, 1421, 1423, 1922, 1655(c); (Revised Pub. L. 97-449, January 12, 1983).

SOURCE: Docket No. 2047, 29 FR 3223, Mar. 11, 1964, unless otherwise noted.

## SPECIAL FEDERAL AVIATION REGULATION No. 27—FULL VENTING AND EXHAUST EMISSION REQUIREMENTS FOR TURBINE ENGINE POWERED AIRPLANES

EDITORIAL NOTE: For the text of SFAR No. 27, see Part 11 of this chapter.

## Subpart A—General

§ 45.1 Applicability.

This part prescribes the requirements for—

(a) Identification of aircraft, and identification of aircraft engines and propellers that are manufactured under the terms of a type or production certificate;

(b) Identification of certain replacement and modified parts produced for installation on type certificated products; and

(c) Nationality and registration marking of U.S. registered aircraft.

(Doc. No. 2047, 29 FR 3223, Mar. 11, 1964, as amended by Amdt. 45-3, 32 FR 188, Jan. 10, 1967)

## Subpart B—Identification of Aircraft and Related Products

§ 45.11 General.

(a) Aircraft and aircraft engines. Aircraft covered under § 21.182 of this chapter must be identified, and each person who manufactures an aircraft engine under a type or production certificate shall identify that engine by means of a fireproof plate that has the

## § 45.13

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Information specified in § 45.13 marked on it by etching, stamping, engraving, or other approved method of fireproof marking. The identification plate for aircraft must be secured in such a manner that it will not likely be defaced or removed during normal service, or lost or destroyed in an accident. Except as provided in paragraph (c) of this section, the aircraft identification plate must be secured to the aircraft at an accessible location near an entrance, except that if it is legible to a person on the ground it may be located externally on the fuselage near the tail surfaces. For aircraft engines, the identification plate must be affixed to the engine at an accessible location, in such a manner that it will not likely be defaced or removed during normal service, or lost or destroyed in an accident.

(b) *Propellers and propeller blades and hubs.* Each person who manufactures a propeller, propeller blade, or propeller hub under the terms of a type or production certificate shall identify his product by means of a plate, stamping, engraving, etching, or other approved method of fireproof identification that is placed on it on a noncritical surface, contains the information specified in § 45.13, and will not be likely to be defaced or removed during normal service or lost or destroyed in an accident.

(c) For manned free balloons, the identification plate prescribed in paragraph (a) of this section must be secured to the balloon envelope and must be located, if practicable, where it is legible to the operator when the balloon is inflated. In addition, the basket and heater assembly must be permanently and legibly marked with the manufacturer's name, part number (or equivalent) and serial number (or equivalent).

[Amdt. 45-3, 32 FR 188, Jan. 10, 1967 as amended by Amdt. 45-7, 33 FR 14402, Sept. 25, 1968; Amdt. 45-12, 45 FR 60183, Sept. 11, 1980; 45 FR 85597, Dec. 29, 1980]

## § 45.13 Identification data.

(a) The identification required by § 45.11 (a) and (b) shall include the following information:

- (1) Builder's name.
- (2) Model designation.

(3) Builder's serial number.

(4) Type certificate number, if any.

(5) Production certificate number, if any.

(6) For aircraft engines, the established rating.

(7) Any other information the Administrator finds appropriate.

(b) Except as provided in paragraph (d)(1) of this section, no person may remove, change, or place identification information required by paragraph (a) of this section, on any aircraft, aircraft engine, propeller, propeller blade, or propeller hub, without the approval of the Administrator.

(c) Except as provided in paragraph (d)(2) of this section, no person may remove or install any identification plate required by § 45.11 of this part, without the approval of the Administrator.

(d) Persons performing work under the provisions of Part 43 of this chapter may, in accordance with methods, techniques, and practices acceptable to the Administrator—

(1) Remove, change, or place the identification information required by paragraph (a) of this section on any aircraft, aircraft engine, propeller, propeller blade, or propeller hub; or

(2) Remove an identification plate required by § 45.11 when necessary during maintenance operations.

(e) No person may install an identification plate removed in accordance with paragraph (d)(2) of this section on any aircraft, aircraft engine, propeller, propeller blade, or propeller hub other than the one from which it was removed.

[Amdt. 45-3, 32 FR 188, Jan. 10, 1967, as amended by Amdt. 45-10, 44 FR 45379, Aug. 2, 1979; Amdt. 45-12, 45 FR 60183, Sept. 11, 1980]

## § 45.14 Identification of critical components.

Each person who produces a part for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section of a manufacturer's maintenance manual or Instructions for Continued Airworthiness shall permanently and legibly mark that component

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holder's serial number.  
 certificate number, if any.  
 production certificate number, if

for aircraft engines, the estab-  
 lishing.

by other information the Ad-  
 ministrator finds appropriate.

Except as provided in paragraph  
 (a) of this section, no person may  
 change, or place identification  
 information required by paragraph (a)  
 of this section, on any aircraft, air-  
 engine, propeller, propeller  
 hub, without the approval  
 of the Administrator.

Except as provided in paragraph  
 (a) of this section, no person may  
 or install any identification  
 information required by § 45.11 of this part,  
 without the approval of the Adminis-

persons performing work under  
 provisions of Part 43 of this chap-  
 ter in accordance with methods,  
 practices, and procedures acceptable to  
 the Administrator—

(1) Move, change, or place the  
 identification information required by  
 paragraph (a) of this section on any  
 aircraft engine, propeller,  
 blade, or propeller hub; or  
 (2) Move an identification plate  
 by § 45.11 when necessary for  
 maintenance operations.

(3) No person may install an identifi-  
 cation plate removed in accordance  
 with paragraph (d)(2) of this section  
 on an aircraft, aircraft engine, pro-  
 peller blade, or propeller  
 other than the one from which it  
 was removed.

§ 45.14, 32 FR 188, Jan. 10, 1967, as  
 amended by Amdt. 45-10, 44 FR 45379, Aug.  
 1979; Amdt. 45-12, 45 FR 60183, Sept. 11,

**§ 45.14 Identification of critical compo-**

Each person who produces a part for  
 replacement time, inspection inter-  
 val, or related procedure is specified in  
 the Airworthiness Limitations section  
 of a manufacturer's maintenance  
 manual or Instructions for Continued  
 Airworthiness shall permanently and  
 legibly mark that component

**Federal Aviation Administration, DOT****§ 45.22**

with a part number (or equivalent)  
 and a serial number (or equivalent).

[Amdt. 45-16, 51 FR 40703, Nov. 7, 1986]

**EFFECTIVE DATE NOTE:** Section 45.14 was  
 revised at 51 FR 40703, Nov. 7, 1986, effec-  
 tive January 6, 1987. For the convenience of  
 the reader, the superseded text is set forth  
 below.

**§ 45.14 Identification of critical components.**

Each person who produces a part for  
 which a replacement time, inspection inter-  
 val, or related procedure is specified in the  
 Airworthiness Limitations section of a Man-  
 ufacturer's Maintenance Manual or Instruc-  
 tions for Continued Airworthiness shall  
 mark that component with a part number  
 (or equivalent) and serial number (or equiv-  
 alent).

[Amdt. 45-12, 45 FR 60183, Sept. 11, 1980]

**§ 45.16 Replacement and modification  
parts.**

(a) Except as provided in paragraph  
 (b) of this section, each person who  
 produces a replacement or modifica-  
 tion part under a Parts Manufacturer  
 Approval issued under § 21.303 of this  
 chapter shall permanently and legibly  
 mark the part with—

- (1) The letters "FAA-PMA";
- (2) The name, trademark, or symbol  
 of the holder of the Parts Manufacturer  
 Approval;
- (3) The part number; and
- (4) The name and model designation  
 of each type certificated product on  
 which the part is eligible for installa-  
 tion.

(b) If the Administrator finds that a  
 part is too small or that it is otherwise  
 impractical to mark a part with any of  
 the information required by para-  
 graph (a) of this section, a tag at-  
 tached to the part or its container  
 must include the information that  
 could not be marked on the part. If  
 the marking required by paragraph  
 (a)(4) of this section is so extensive  
 that to mark it on a tag is impractical,  
 the tag attached to the part or the  
 container may refer to a specific read-  
 ily available manual or catalog for  
 part eligibility information.

[Amdt. 45-8, 37 FR 10660, May 26, 1972, as  
 amended by Amdt. 45-14, 47 FR 13315, Mar.  
 29, 1982]

**Subpart C—Nationality and  
Registration Marks****§ 45.21 General.**

(a) Except as provided in § 45.22, no  
 person may operate a U.S.-registered  
 aircraft unless that aircraft displays  
 nationality and registration marks in  
 accordance with the requirements of  
 this section and §§ 45.23 through  
 45.33.

(b) Unless otherwise authorized by  
 the Administrator, no person may  
 place on any aircraft a design, mark,  
 or symbol that modifies or confuses  
 the nationality and registration marks.

(c) Aircraft nationality and registra-  
 tion marks must—

(1) Except as provided in paragraph  
 (d) of this section, be painted on the  
 aircraft or affixed by any other means  
 insuring a similar degree of perma-  
 nence;

(2) Have no ornamentation;

(3) Contrast in color with the back-  
 ground; and

(4) Be legible.

(d) The aircraft nationality and regis-  
 tration marks may be affixed to an  
 aircraft with readily removable mate-  
 rial if—

(1) It is intended for immediate de-  
 livery to a foreign purchaser;

(2) It is bearing a temporary regis-  
 tration number; or

(3) It is marked temporarily to meet  
 the requirements of § 45.22(c)(1).

[Doc. No. 8003, Amdt. 45-5, 33 FR 450, Jan  
 12, 1968]

**§ 45.22 Exhibition, antique, and other air-  
craft: Special rules.**

(a) When display of aircraft nation-  
 ality and registration marks in accord-  
 ance with §§ 45.21 and 45.23 through  
 45.33 would be inconsistent with exhi-  
 bition of that aircraft, a U.S.-regis-  
 tered aircraft may be operated with-  
 out displaying those marks anywhere  
 on the aircraft if:

(1) It is operated for the purpose of  
 exhibition, including a motion picture  
 or television production, or an air-  
 show;

(2) Except for practice and test  
 flights necessary for exhibition pur-  
 poses, it is operated only at the loca-

## § 45.23

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tion of the exhibition, between the exhibition locations, and between those locations and the base of operations of the aircraft; and

(3) For each flight in the United States:

(i) It is operated with the prior approval of the General Aviation District Office, in the case of a flight within the designated airport control zone of the takeoff airport, or within 5 miles of that airport if it has no designated control zone; or

(ii) It is operated under a flight plan filed under § 91.83 of this chapter describing the marks it displays, in the case of any other flight.

(b) A small U.S.-registered aircraft built at least 30 years ago or a U.S.-registered aircraft for which an experimental certificate has been issued under § 21.191(d) or 21.191(g) for operation as an exhibition aircraft or as an amateur-built aircraft and which has the same external configuration as an aircraft built at least 30 years ago may be operated without displaying marks in accordance with §§ 45.21 and 45.23 through 45.33 if:

(1) It displays in accordance with § 45.21(c) marks at least 2 inches high on each side of the fuselage or vertical tail surface consisting of the Roman capital letter "N" followed by:

(i) The U.S. registration number of the aircraft; or

(ii) The symbol appropriate to the airworthiness certificate of the aircraft ("C", standard; "R", restricted; "L", limited; or "X", experimental) followed by the U.S. registration number of the aircraft; and

(2) It displays no other mark that begins with the letter "N" anywhere on the aircraft, unless it is the same mark that is displayed under paragraph (b)(1) of this section.

(c) No person may operate an aircraft under paragraph (a) or (b) of this section—

(1) In an ADIZ or DEWIZ described in Part 99 of this chapter unless it temporarily bears marks in accordance with §§ 45.21 and 45.23 through 45.33;

(2) In a foreign country unless that country consents to that operation; or

(3) In any operation conducted under Part 121, 127, 133, 135, or 137 of this chapter.

(d) If, due to the configuration of an aircraft, it is impossible for a person to mark it in accordance with §§ 45.21 and 45.23 through 45.33, he may apply to the Administrator for a different marking procedure.

[Doc. No. 8093, Amdt. 45-5, 33 FR 450, Jan. 12, 1968, as amended by Amdt. 45-13, 46 FR 48603, Oct. 1, 1981]

## § 45.23 Display of marks; general.

(a) Each operator of an aircraft shall display on that aircraft marks consisting of the Roman capital letter "N" (denoting United States registration) followed by the registration number of the aircraft. Each suffix letter used in the marks displayed must also be a Roman capital letter.

(b) When marks that include only the Roman capital letter "N" and the registration number are displayed on limited or restricted category aircraft or experimental or provisionally certificated aircraft, the operator shall also display on that aircraft near each entrance to the cabin or cockpit, in letters not less than 2 inches nor more than 8 inches in height, the words "limited," "restricted," "experimental," or "provisional airworthiness," as the case may be.

[Doc. No. 8093, Amdt. 45-5, 33 FR 450, Jan. 12, 1968, as amended by Amdt. 45-9, 42 FR 41102, Aug. 15, 1977]

## § 45.25 Location of marks on fixed-wing aircraft.

(a) The operator of a fixed-wing aircraft shall display the required marks on either the vertical tail surfaces or the sides of the fuselage, except as provided in § 45.29(f).

(b) The marks required by paragraph (a) of this section shall be displayed as follows:

(1) If displayed on the vertical tail surfaces, horizontally on both surfaces, horizontally on both surfaces of a single vertical tail or on the outer surfaces of a multivertical tail. However, on aircraft on which marks at least 3 inches high may be displayed in accordance with § 45.29(b)(1), the marks may be displayed vertically on the vertical tail surfaces.

(2) If displayed on the fuselage surfaces, horizontally on both sides of the

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due to the configuration of an aircraft it is impossible for a person to read the marks in accordance with §§ 45.21 through 45.33, he may apply to the Administrator for a different procedure.

8093, Amdt. 45-5, 33 FR 450, Jan. 15, 1964, as amended by Amdt. 45-13, 40 FR 15, 1975

Display of marks; general.

Each operator of an aircraft shall display on that aircraft marks consisting of the Roman capital letter "N" (National United States registration) and the registration number of the aircraft. Each suffix letter used in the marks displayed must also be a Roman capital letter.

When marks that include only the Roman capital letter "N" and the registration number are displayed on restricted category aircraft, experimental or provisionally certificated aircraft, the operator shall also display on that aircraft near each end of the cabin or cockpit, in letters less than 2 inches nor more than 2 inches in height, the words "restricted," "experimental," "provisional airworthiness," as may be.

8093, Amdt. 45-5, 33 FR 450, Jan. 15, 1964, as amended by Amdt. 45-9, 42 FR 15, 1977

Location of marks on fixed-wing aircraft.

Each operator of a fixed-wing aircraft shall display the required marks on the vertical tail surfaces or the fuselage, except as provided in § 45.29(f).

The marks required by paragraph (f) of this section shall be displayed as follows:

(1) *Vertical tail.* The marks shall be displayed on the vertical tail surface horizontally on both surfaces of the vertical tail or on the outer surface of a multivertical tail. However, on aircraft on which marks at least 12 inches high may be displayed in accordance with § 45.29(b)(1), the marks shall be displayed vertically on the vertical surfaces.

(2) *Fuselage.* The marks shall be displayed on the fuselage surface horizontally on both sides of the

Federal Aviation Administration, DOT

§ 45.29

fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer. However, if engine pods or other appurtenances are located in this area and are an integral part of the fuselage side surfaces, the operator may place the marks on those pods or appurtenances.

(Amdt. 45-9, 42 FR 41102, Aug. 15, 1977)

§ 45.27 Location of marks; nonfixed-wing aircraft.

(a) *Rotorcraft.* Each operator of a rotorcraft shall display on that rotorcraft horizontally on both surfaces of the cabin, fuselage, boom, or tail the marks required by § 45.23.

(b) *Airships.* Each operator of an airship shall display on that airship the marks required by § 45.23, horizontally on—

(1) The upper surface of the right horizontal stabilizer and on the under surface of the left horizontal stabilizer with the top of the marks toward the leading edge of each stabilizer; and

(2) Each side of the bottom half of the vertical stabilizer.

(c) *Spherical balloons.* Each operator of a spherical balloon shall display the marks required by § 45.23 in two places diametrically opposite and near the maximum horizontal circumference of that balloon.

(d) *Nonspherical balloons.* Each operator of a nonspherical balloon shall display the marks required by § 45.23 on each side of the balloon near its maximum cross section and immediately above either the rigging band or the points of attachment of the basket or cabin suspension cables.

(Docket No. 2047, 29 FR 3223, Mar. 11, 1964, as amended by Amdt. 45-15, 48 FR 11392, Mar. 17, 1983)

§ 45.29 Size of marks.

(a) Except as provided in paragraph (f) of this section, each operator of an aircraft shall display marks on the aircraft meeting the size requirements of this section.

(b) *Height.* The character marks must be of equal height and on—

(1) Fixed-wing aircraft, must be at least 12 inches high, except that:

(i) An aircraft displaying marks at least 2 inches high before November 1, 1981 and an aircraft manufactured after November 2, 1981, but before January 1, 1983, may display those marks until the aircraft is repainted or the marks are repainted, restored, or changed;

(ii) Marks at least 3 inches high may be displayed on a glider;

(iii) Marks at least 3 inches high may be displayed on an aircraft for which an experimental certificate has been issued under § 21.191(d) or 21.191(g) for operating as an exhibition aircraft or as an amateur-built aircraft when the maximum cruising speed of the aircraft does not exceed 180 knots CAS; and

(iv) Marks may be displayed on an exhibition, antique, or other aircraft in accordance with § 45.22.

(2) *Airships, spherical balloons, and nonspherical balloons,* must be at least 3 inches high; and

(3) *Rotorcraft,* must be at least 12 inches high, except that rotorcraft displaying before April 18, 1983, marks required by § 45.29(b)(3) in effect on April 17, 1983, and rotorcraft manufactured on or after April 18, 1983, but before December 31, 1983, may display those marks until the aircraft is repainted or the marks are repainted, restored, or changed.

(c) *Width.* Characters must be two-thirds as wide as they are high, except the number "1", which must be one-sixth as wide as it is high, and the letters "M" and "W" which may be as wide as they are high.

(d) *Thickness.* Characters must be formed by solid lines one-sixth as thick as the character is high.

(e) *Spacing.* The space between each character may not be less than one-fourth of the character width.

(f) If either one of the surfaces authorized for displaying required marks under § 45.25 is large enough for display of marks meeting the size requirements of this section and the other is not, full-size marks shall be placed on the larger surface. If neither surface is large enough for full-size marks, marks as large as practicable shall be displayed on the larger of the two surfaces. If any surface authorized to be marked by § 45.27 is not large

## § 45.31

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enough for full-size marks, marks as large as practicable shall be placed on the largest of the authorized surfaces.

(g) *Uniformity.* The marks required by this part for fixed-wing aircraft must have the same height, width, thickness, and spacing on both sides of the aircraft.

(Doc. No. 2047, 29 FR 3223, Mar. 11, 1964, as amended by Amdt. 45-2, 31 FR 9663, July 21, 1966; Amdt. 45-8, 42 FR 41102, Aug. 15, 1977; Amdt. 45-13, 46 FR 48604, Oct. 1, 1981; Amdt. 45-16, 48 FR 11392, Mar. 17, 1983)

## § 45.31 Marking of export aircraft.

A person who manufactures an aircraft in the United States for delivery outside thereof may display on that aircraft any marks required by the State of registry of the aircraft. However, no person may operate an aircraft so marked within the United States, except for test and demonstration flights for a limited period of time, or while in necessary transit to the purchaser.

## § 45.33 Sale of aircraft; removal of marks.

When an aircraft that is registered in the United States is sold, the holder of the Certificate of Aircraft Registration shall remove, before its delivery to the purchaser, all United States marks from the aircraft, unless the purchaser is—

(a) A citizen of the United States;

(b) An individual citizen of a foreign country who is lawfully admitted for permanent residence in the United States; or

(c) When the aircraft is to be based and primarily used in the United States, a corporation (other than a corporation which is a citizen of the United States) lawfully organized and doing business under the laws of the United States or any State thereof.

(Amdt. 45-11, 44 FR 61938, Oct. 29, 1979)

## PART 47—AIRCRAFT REGISTRATION

## Subpart A—General.

## Sec.

- 47.1 Applicability.
- 47.2 Definitions.
- 47.3 Registration required.
- 47.5 Applicants.

## Sec.

- 47.7 United States citizens and resident aliens.
- 47.8 Voting trusts.
- 47.9 Corporations not U.S. citizens.
- 47.11 Evidence of ownership.
- 47.13 Signatures and instruments made by representatives.
- 47.16 Identification number.
- 47.18 Temporary registration numbers.
- 47.17 Fees.
- 47.19 FAA Aircraft Registry.

## Subpart B—Certificates of Aircraft Registration

- 47.81 Application.
- 47.83 Aircraft not previously registered anywhere.
- 47.85 Aircraft last previously registered in the United States.
- 47.87 Aircraft last previously registered in a foreign country.
- 47.89 Effective date of registration.
- 47.41 Duration and return of Certificate.
- 47.43 Invalid registration.
- 47.45 Change of address.
- 47.47 Cancellation of Certificate for export purpose.
- 47.49 Replacement of Certificate.
- 47.51 Triennial aircraft registration report.

## Subpart C—Dealer's Aircraft Registration Certificate

- 47.61 Dealers' Aircraft Registration Certificate.
- 47.63 Application.
- 47.65 Eligibility.
- 47.67 Evidence of ownership.
- 47.69 Limitations.
- 47.71 Duration of Certificate; change of status.

**AUTHORITY:** Secs. 307, 319, 501, 563, 565, 566, and 1103, 72 Stat. 749, 752, 771, 772, 774, 797; 49 U.S.C. 1348, 1354, 1401, 1403, 1405, 1408, and 1502, and the Convention of the International Recognition of Rights in Aircraft; 4 U.S.C. 1830.

**SOURCE:** Docket No. 7190, 31 FR 4495, Mar. 17, 1966, unless otherwise noted.

## Subpart A—General

## § 47.1 Applicability.

This part prescribes the requirements for registering aircraft under section 501 of the Federal Aviation Act of 1958 (49 U.S.C. 1401). Subpart B applies to each applicant for, and holder of, a Certificate of Aircraft Registration. Subpart C applies to each applicant for, and holder of, a



FAA regulations for 12" H/S 12/8



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# News:

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Alaskan Region  
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(907) 271-5296

**FOR IMMEDIATE RELEASE**  
**September 30, 1987**  
**#87-35**

**contact: Paul Steucke**

## LARGER AIRCRAFT NUMBERS REQUIRED

Effective December 8, 1987, all aircraft entering into the Alaskan ADIZ or DEWIZ (Alaskan Air Defense Identification Zones) north of Yakutat, will be required to have 12 inch high identifying registration numbers and letters on the outside of the aircraft (map attached). Previous regulations required the letters and numbers to be at least 3 inches high. The major purpose of the larger numbers is to allow law enforcement officers patrolling coastal areas to identify suspect aircraft which might be carrying drugs into the country. For example, aircraft flying to Anchorage from Juneau will require the larger numbers because they are penetrating the zones. This also includes flights from Canada into central and northern Alaska.

Secretary of Transportation Elizabeth Dole announced the new rule which contains three major provisions, on September 17, 1987.

The first new requirement is that all aircraft flying through off-shore air defense identification zones display 12 inch high nationality and registration marks ("N numbers"). The second requires aircraft to have an externally mounted identification plates. The third requires that aircraft modified with supplemental fuel tanks, which were installed in compliance with FAA regulations, carry authorization for the modification aboard the aircraft.

Dole said, "The larger markings will make it easier for law enforcement officers to identify suspect aircraft, and the external identification plates will help authorities to identify aircraft that have been stolen and possibly used to smuggle drugs into the U.S."

more...

5

Current FAA regulations allow some aircraft to display N-numbers only three inches high, which makes them difficult to read at a distance. Although the FAA rules were changed in Nov. 1981 to require the display of at least 12 inch high marks, the smaller markings were allowed to continue until the airplane was repainted or the numbers changed.

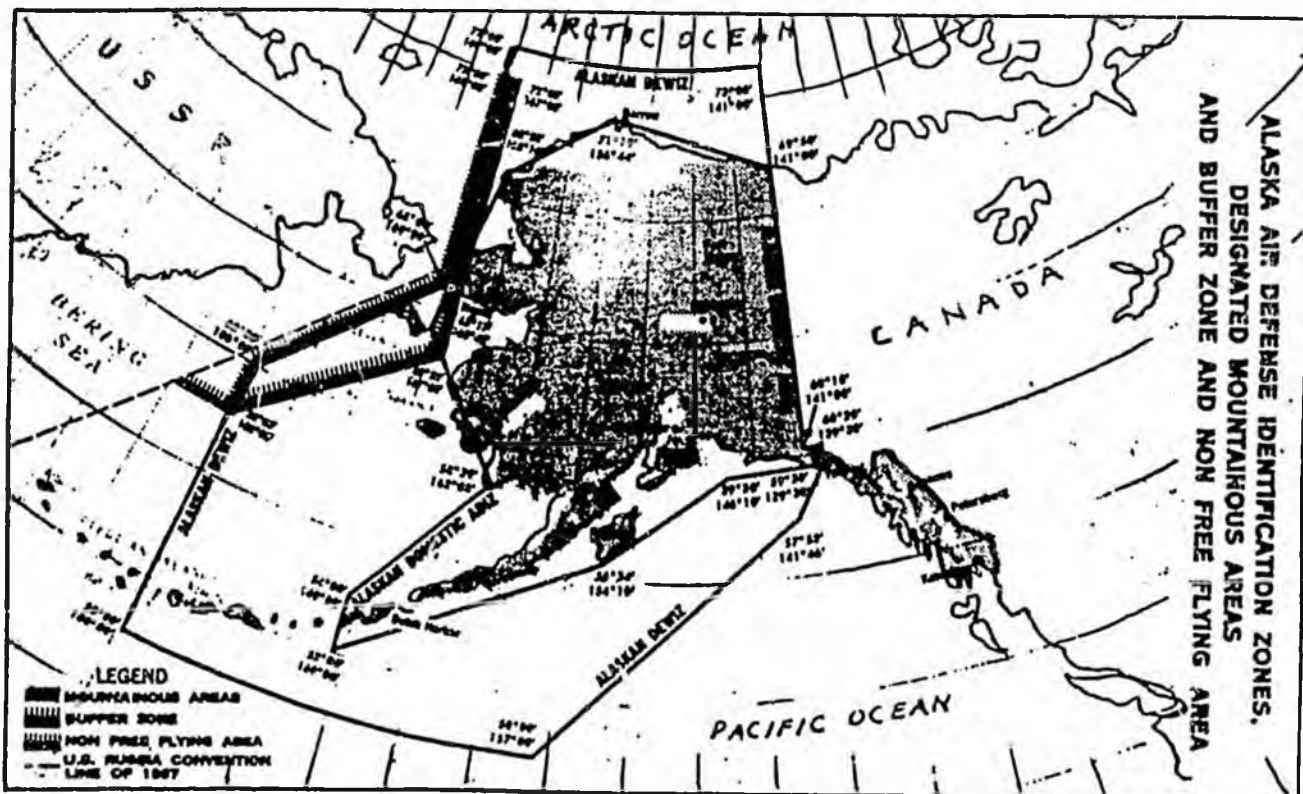
The new rule overrides this past exception and requires display of the 12 inch numbers when an aircraft is penetrating an Air Defense Identification Zone or Defense Early Warning Identification Zone where U.S. Customs agents, the Coast Guard or other law enforcement aircraft are most likely to attempt air-to-air identification. These zones cover all of Alaska north of Yakutat, including the Alaska-Canada border.

Maps of these zones are in the Alaska Airmen Supplement. Pilots seeking additional information should contact their local FAA Flight Standards District Office.

The identification data plates must be readable to a person standing outside the aircraft when it is on the ground. This will allow law enforcement officers to cross check the serial number of an aircraft with FAA records to determine if the N numbers had been changed in order to conceal the ownership of the aircraft or hide the fact that it had been stolen. This now can be done only by gaining access to the interior of some aircraft.

The new requirement that aircraft operators carry documentation covering the installation of extra fuel tanks also will help identify suspect aircraft used in smuggling operations.

// // //



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December 10, 1987

State House Representative Steve Frank  
1125 Sunset Drive  
Fairbanks, AK 99701

Dear Representative:

Please note the attached article from Air Alaska, November 1987 issue. I understand the date for implementation has been moved to March 7, 1988. I don't believe the provisions for 12" numbers or for an outside data plate are necessary for Alaska. The requirement for the form 337 to be aboard the aircraft for fuel tanks installed according to FAA regulations is a matter of paperwork and not of significant concern. The main purpose of the first two provisions is to make it easier for Customs to identify aircraft suspected of running drugs across the Air Defense Identification Zones. The pertinent FAA regulations are FAR 45.29(h) for the 12" numbers, FAR 45.11(d) for the data plate information, and FAR 91.27(c) for the fuel tank requirements.

I am concerned because my wife and I invited the International Cessna 170 Association to convention in Alaska for a week during July 1988. We expect close to 100 airplanes to come to Fairbanks. Many of the aircraft have small numbers. All Cessna 170's are between 32 and 40 years old. The amount of money that we expect to be spent by the occupants of each Cessna 170 is substantial, and will be spread throughout the communities of Alaska. Gas sales, hotel rooms, meals, sightseeing, and tourist purchases will result in a boost to the businesses in the area, while taxes or direct fees will generate revenue for the local governments and the State of Alaska. We don't want to miss the opportunity for the revenue.

More importantly, however, is the fact that we do not want to have the inconvenience for our visitors and fellow Alaskans. Whenever one of us flies across the border to visit our neighbors in Canada, we will have to comply with the new law. Contrary to what the FAA says in their comments on the regulations, my maps show that flights conducted entirely within Alaska can be subject to the rules. Look at the fact that Tin City, Wales Point Hope, Icy Cape, Wainwright and Point Barrow Dew Station are outside the Alaskan ADIZ. Anytime the ADIZ or DEWIZ is penetrated, the law comes into effect.

The regulations mentioned above were designed for the coastal areas of the lower 48, where drug running is a real problem. Here, over-regulation, by virtue of including Alaska in regulations that do not fit the situation is a problem. This happens in more instances than just this one. Please provide your support by getting Congress to make an exception for Alaska.

I would be happy to discuss this with you further. I certainly appreciate your help.

Sincerely,



Rick Schikora

### Larger aircraft numbers required

Effective Dec. 8, 1987, all aircraft entering into the Alaska ADIZ or DEWIZ (Alaskan Air Defense Identification Zones) north of Yakutat will be required to have 12-inch high identifying registration numbers and letters on the outside of the aircraft, says the Federal Aviation Administration.

The major purpose of the larger numbers is to allow law enforcement officials patrolling coastal areas to identify suspect aircraft which might be carrying drugs into the country, FAA said. For example, aircraft flying from Anchorage to Juneau will require the larger numbers because they are penetrating the zones. This also includes flights from Canada into central and northern Alaska.

The rule, announced Sept. 17, contains three provisions: 12-inch numbers, aircraft must have externally mounted identification plates, and aircraft modified with supplemental fuel tanks installed to FAA regulations must carry authorization for the modification aboard the aircraft.

Maps of the zones are in the Alaska Airmen Supplement. Pilots seeking more information should contact their local FAA Flight Standards District Office.

# ADIZ problem is fixing itself

By KENT LEE WOODMAN

As recently reported in these pages, the FAA has adopted three changes to the FARs which affect certain general aviation aircraft. In addition to the change in documentation for internal Auxilliary fuel tanks and the requirement for all aircraft to have certain data plates, there was a rule requiring all aircraft "penetrating" the ADIZ (Alaska Defense Identification Zone) or the DEWIZ (Distant Early Warning Identification Zone) to have 12" identification within a 90 day compliance period following Dec. 8 or early March 1988.

The Alaska Airmen's Association, tried valiently to prevent this rule from taking effect for Alaskan bound aircraft, because it prevented flights from Anchorage and Juneau or to and from Canada without the expensive alteration, they felt, interfering with their rights of interstate travel. Suddenly, from an unlikely and

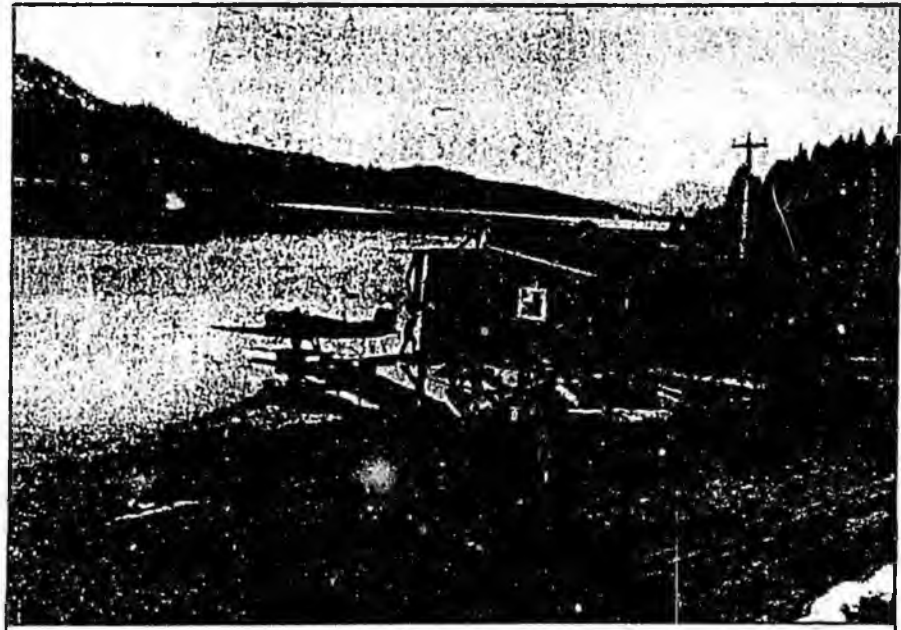
completely unsuspected corner, comes help: clearly the easiest solution (except revocation of the rule) would be to simply change the boundaries of the ADIZ and this is precisely what has been proposed. The ADIZ and DEWIZ have been in place for many years with no changes. Within these zones the U.S. Air Force had been intercepting increased numbers of Russian aircraft, so it is a vital area. The surprise suggested change, however, is to delete the DEWIZ and shrink the ADIZ down to an offshore area surrounding the land mass of Alaska, and thus prevent all the difficulties the Airmen perceived they faced.

The accompanying map shows the newly proposed area for the ADIZ. It is obvious that "penetrations" of the ADIZ will be greatly reduced by this change, and that there will be no unwarranted intrusions on the privacy of visitors to Alaska, folks going to Whitehorse for the weekend or

Alaskans trying to fly to their capitol. The Airmen have enthusiastically embraced the proposed change as a masterful, if surprising solution to a complex bureaucratic problem. At press time the notice of proposed rule making was in final draft and should appear in the Federal Register within about 30 days. Assuming there are no major objections, it could be in place within 180 days. As seen in the diagram, the present boundaries place Nome and portions of the Seward Peninsula in the ADIZ. The Airmen are petitioning to move it to at least the shoreline.

Finally, that leaves the question of

See ADIZ, Page 24



Here we go again with another edition of "name that mystery plane." Last month's mystery plane (see letters to the editor page) was a replica of the

tals. Preliminary NTSB statistics for the first half of 1987 show general aviation has continued to improve its safety record this year, with significant declines in numbers of accidents, fatal accidents and fatalities.

The National Safety Council's 1987 edition of Accident Facts shows more Americans were killed in bicycle or boating accidents during 1986 than in general aviation accidents, which represented only 1 percent of the total number of accidental deaths in the U.S.

In 1986, there were 958 general aviation accidents compared to 1,229 marine transportation fatalities. The Council estimates 1,200 people lost their lives in collisions between bicycles and motor vehicles.

The NSC also estimated that in 1986, 47,900 people died in motor vehicle accidents; 11,000 died in falls; 5,600 drowned; 4,800 died as a result of fires or burns, and 4,000 more were accidentally poisoned.

## Meteorologist Evangelista will write column on Alaska flying and weather

Meteorologist and pilot Mark Evangelista will be writing columns, Eye on the Sky, for Air Alaska concerning weather and Alaska flying. His first column appears in this issue on Page 20.

In the aviation meteorology business for five years, Evangelista came to Alaska with the U.S. Air Force. "I was one of the few that asked to come up here," he says.

A ground instructor as well as a meteorologist, Evangelista flies with the Elmendorf AFB Aero Club, preferring light singles.

Evangelista, who works for the National Weather Service, can also

Air Alaska January 1988 page 1

ment prototypes may be on display, and plans include video taping presentations from industry experts for later programs

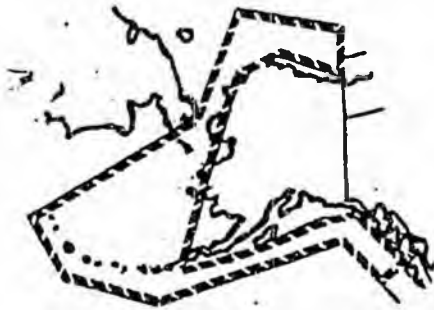
Initial thinking is to use the ACC Aviation Complex hangar and have booths, show area, tables for swap meet and perhaps classrooms for special presentations.

Manufacturers, dealers and individuals who are interested in participating in the program should contact Kent Lee Woodman, c/o the Alaska Airmen's Association Inc., c/o ACC Aviation Complex, 2811 Merrill Field Drive, Anchorage 99501. Details will be presented in the February and March issues of Air Alaska.

## • ADIZ

Continued from Page 1

compliance with the present new rule and enforcement between March 8 and the change in the ADIZ. How foolish it would be to make the major expenditure to comply for two months, or to be involved in an enforcement action for an area we know in advance is about to change. To his credit, Frank A. Cunningham, the FAA Alaskan Region Director, has initiated action to either exempt Alaska, or obtain permission to stay enforcement pending the newest rule; NORAD and the USAF are to be commended for their proposal, and the FAA for its logical help in the interim.



The sketch shows the preliminary proposed new boundaries for the Alaskan ADIZ. The DEWIZ would disappear entirely. The move is sponsored by NORAD, which is realigning all of its defense identification zones to match the current, state of the art radar systems and perceived threat to North America. Sketch courtesy FAA.

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A th



Greater Fairbanks

**Chamber** of Commerce

First National Center  
100 Cushman Street

90714521105

P.O. Box 7446  
Fairbanks, Alaska 99707

RESOLUTION 1 - 0188

WHEREAS, the Greater Fairbanks Chamber of Commerce is concerned about the economy in Fairbanks, and

WHEREAS, the federal government frequently institutes regulations and laws which have detrimental effects on the economy, and

WHEREAS, the International Cessna 170 Association has chosen to convention in Fairbanks during July 1988, with an expected attendance of 100 airplanes most of which will be Cessna 170s ranging in age from 32 to 40 years old, and

WHEREAS, the Federal Aviation Administration has recently instituted a regulation requiring 12 inch registration numbers on aircraft penetrating the Alaska Domestic Air Defense Identification Zone or the Distant Early Warning Identification Zone, and

WHEREAS, the reason for requiring 12 inch numbers is to assist Customs in identifying aircraft suspected of running drugs across ADIZs or DEWIZs, and

WHEREAS, these regulations will likely have a negative impact on the number of tourists coming to Alaska by aircraft, for the Cessna 170 Convention and other purposes,

THEREFORE BE IT RESOLVED, that the Greater Fairbanks Chamber of Commerce supports the repeal of regulation FAR 45.21 (h) requiring 12 inch numbers for Alaska, and its companion regulation FAR 45.11 (a) and (d), and

BE IT FURTHER RESOLVED, that if the regulations cannot be repealed for Alaska then a special blanket exemption be granted for the International Cessna 170 conventioners.

DATED THIS 4th

DAY OF January 1988.

BY Mike Kelly  
Mike Kelly, Chairman

BY W.R. Cox  
W.R. Cox, President & C.E.O.

Introduced by: City Council Members  
Date: January 11, 1988

RESOLUTION NO. 2921

A RESOLUTION IN SUPPORT OF THE REPEAL OF  
FEDERAL AVIATION REGULATION (FAR) 45.21  
(h) AND 45.11 (a) and (d).

WHEREAS, the Greater Fairbanks Chamber of Commerce is concerned about the economy in Fairbanks, and

WHEREAS, the federal government frequently institutes regulations and laws which have detrimental effects on the economy, and

WHEREAS, the International Cessna 170 Association has chosen to convention in Fairbanks during July 1988, with an expected attendance of 100 airplanes most of which will be Cessna 170s ranging in age from 32 to 40 years old, and

WHEREAS, the Federal Aviation Administration has recently instituted a regulation requiring 12 inch registration numbers on aircraft penetrating the Alaska Domestic Air Defense Identification Zone or the Distant Early Warning Identification Zone, and

WHEREAS, the reason for requiring 12 inch numbers is to assist Customs in identifying aircraft suspected of running drugs across ADIZs or DEWIZs, and

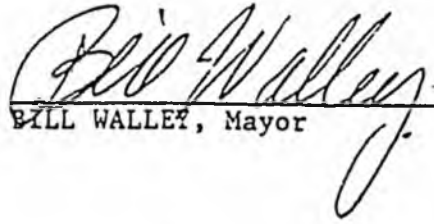
WHEREAS, these regulations will likely have a negative impact on the number of tourists coming to Alaska by aircraft, for the Cessna 170 Convention and other purposes,

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF FAIRBANKS, ALASKA supports the repeal of regulation FAR 45.21 (h) requiring 12 inch numbers for Alaska, and its companion regulation FAR 45.11 (a) and (d), and




BE IT FURTHER RESOLVED, that if the regulations cannot be repealed for Alaska then a special blanket exemption be granted for the International Cessna 170 conventioners.

PASSED and APPROVED this 11th day of January, 1988.

  
BILL WALLEY, Mayor

ATTEST:

  
NORMA J. MARKS, Acting City Clerk

MIS:RESO 2921:njm

CURRENT ALASKAN ADIZ ALIGNMENT



7 11

PROPOSED ALASKAN ADIZ ALIGNMENT



BRIEFING ITEM FOR AVIATION FORUM

SUBJECT: AIR DEFENSE IDENTIFICATION ZONE (ADIZ) REALIGNMENT

Proposed effective date: May 5, 1988.

BACKGROUND

The military has decided that the ADIZ realignment is necessitated by the various North American Aerospace Defense Modernization initiatives and HQ NORAD direction to simplify identification zones for North America.

CHANGES

The terms "Coastal ADIZ," "Domestic ADIZ," and "Distant Early Warning Identification Zone (DEWIZ)" will be eliminated. Henceforth, "ADIZ" will be the only term used regarding identification zones.

Significant Alaskan NORAD Region changes.

1. The Alaskan ADIZ will include all of the Aleutian Islands (current DEWIZ does not).
2. Off the Alaska north coast, the ADIZ line will extend northward an additional 120 nautical miles.
3. A portion of the existing ADIZ line between Alaska and Canada will be eliminated (see marking on proposed realignment chart).
4. Establish ADIZ along southeast coast of Alaska to cover gap which presently exists between the Canadian Coastal ADIZ and the Alaskan DEWIZ.

Other changes.

1. Institute a new ADIZ off both the Canadian and U.S. coastal areas to provide for integral perimeter coverage for the continent.
2. The ADIZ across central Canada is no longer required due to the closure of the Pinetree line radars.

Attached is depiction of current alignment and the proposed realignment. FAA Washington Headquarters is preparing a notice of proposed change to FAR 99, "Security Control of Air Traffic," for publication in the Federal Register.

AAL-500 *He*  
12/1/87

2 Attachments

# Alaska State Legislature

**STEVE FRANK**

DISTRICT 20A  
Finance Committee

1125 Sunset Drive  
Fairbanks, Alaska 99701



White in Juneau  
P.O. Box V  
Juneau, Alaska 99811  
(907) 465-3709

## House of Representatives

TO: The House Transportation Committee  
FROM: Rep. Steve Frank *AS*  
RE: HJR 46 - "Size of Aircraft Numbers"  
DATE: January 27, 1988

---

House Joint Resolution 46 requests that the FAA grant an exemption from their new regulations for Alaskan pilots flying intrastate.

The Federal Aviation Administration (FAA) has implemented new regulations requiring planes that penetrate an Air Defense Identification Zone (ADIZ) or a Distant Early Warning Identification Zone (DEWIZ) to display larger registration numbers and exterior identification plates. Currently the majority of Alaska is surrounded by an ADIZ with the exception of Southeastern and some parts of Western Alaska.

Recently the Air Force announced its plans to revise the ADIZ which will solve the problem in most of Alaska. However, the proposed ADIZ will encompass significant parts of Western Alaska such as St. Mary's, Nome, Pt. Hope, and Icy Cape. As a consequence, aircraft flying from anywhere in Alaska to these places would still have to comply with the 12 inch lettering requirement.

For that reason we are requesting that the FAA grant this exemption for Alaskan planes flying intrastate. In addition, since the proposed ADIZ will not become effective until May, we are requesting a waiver from the new regulations until the new ADIZ is implemented.

Thank you for your consideration.

STATE OF ALASKA 1988 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: HCR 46  
Publish Date: \_\_\_\_\_

REQUEST

Revision Date: \_\_\_\_\_  
Title: House Concurrent Resolution 44  
Relating to a Copper River Toll Road  
Sponsor: Cato  
Requestor: Cato

Agency Affected: DOT&PF  
BRU: \_\_\_\_\_  
Components: \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		*	*	*	*	*
CAPITAL		*	*	*	*	*
REVENUE		*	*	*	*	*

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL		*	*	*	*	*

POSITIONS:

FULL-TIME		*	*	*	*	*
PART-TIME		*	*	*	*	*
TEMPORARY						

**ANALYSIS:** The use of a toll authority is not established procedure in the department. The assumptions expressed in this analysis represent the department's initial reactions to this concept and may need modification to more accurately reflect the opportunity costs of money, the pay back terms and other financial assumptions. In addition, federal aid funds for construction may have to be re-paid prior to establishing a toll.

\* See attached page, typewritten analysis dated 2-26-88.

Prepared by: David W. Truax/Lynn J. Harnisch Phone: 474-2431/451-2210  
Division: DOT&PF Regional Director, Northern Region Date: 2-25-88

Approved by Commissioner: Mark S. Hickey *MH* Date: 2-29-88  
Agency: DOT&PF

Distribution (by preparer):

Legislative Finance  
Legislative Sponsor  
Requestor  
Office of Management and Budget  
Impacted Agency(ies)  
Senate Secretary

## ASSUMPTIONS

### A) Toll Checkpoint

- 1) One toll checkpoint would be needed to collect tolls.
- 2) Checkpoint costs were based on similar costs for a checkpoint on the Dalton Highway.
- 3) A checkpoint for year round occupancy would be more expensive as it would require additional insulation, permanent utilities systems, larger living quarters, etc.

### B) Pioneer Road

- 1) Would be 18ft. wide, screened gravel surface and have trestle type bridges. The cost for this work assumes that 18ft. wide road could be constructed so that it was safe and maintainable and that only minimal reconstruction on the existing railbed would be necessary. Should any of these parameters be forced to change, during the course of actual design, the cost could increase substantially. Cost increases would depend on the type of changes that were necessary.

### C) Federal Aid Secondary

- 1) Would be 28ft. wide, crushed gravel surface and have standard bridges. The cost is based on current construction costs for typical gravel surface Federal Aid secondary roads. Assumes construction of access road from the Million Dollar Bridge, Mile Post 49, to Chitina.

### D) Copper River Bridge

- 1) To keep per vehicle tolls to a minimum, it was assumed that the estimated \$7,500,000 to construct a bridge across the Copper River, adjacent to the Million Dollar Bridge, would be done with Federal discretionary bridge funds. Therefore, this particular cost does not appear in the overall capital costs. If discretionary funding cannot be obtained the \$7,500,000 construction cost would have to be added to the total capital costs of the project. This would increase the per vehicle toll for capital costs payoff by \$7.00 for seasonal and \$4.00 for year-round.

### E) Maintenance Station

- 1) In order to distribute the added mileage evenly, one additional station would be needed in the Tasnuna River area and additional equipment would be needed at the Chitina Station.
- 2) Facilities requirements to meet seasonal needs.  
2,400 sq. ft. shop  
Generator Bldg. w/two generators  
4 each trailer pads for 14X70 trailers.  
Utilities and water/well system.
- 3) Facilities requirements to meet year round needs (in addition to above building needs).  
2 Trailer pads for 14X70 trailers.  
Utilities and water system.  
Sand shed 2,000 sq. ft.

2,000 sq. ft. work store building.

F) Maintenance Equipment

- 1) Seasonal (either type road)
  - a) New Tasnuna Station
    - Motor graders CAT 14 Type (2)
    - Dump Truck 8 Yd.
    - Loader 4 yd. type (1)
    - Dozer D-8 type
    - 2 4WD 3/4 ton pickups
    - Low tractor trailer
  - b) The mileage this road would add to the existing system would be slightly more than a new station should handle. Therefore, some additional equipment would be needed at the existing Chitina Station to cover the extra northernmost portion of the additional mileage. This additional equipment would also be used on other state-maintained roads in the Chitina area.
  - c) Chitina Station (additional equipment)
    - Motor grader CAT 14 type (1)
    - Loader 4yd. type (1)
    - Dump Truck 8 yd. type (1)
- 2) Year-round (in addition to season equipment needs) [either type road]
  - a) Tasnuna Station
    - Truck type Rotary snowblower 2 each 1200 tph
    - 4x4 Oshkosh with V-nose plow, belly blade and wing, 2 each
    - Sander

G) Building and equipment needs are based on:

- 1) Historical information from old railroad records, which show that a substantial maintenance effort was required to keep the alignment open and in good repair at all times of the year.
- 2) Personal on-site observations of substantial slide and erosion activity by DOT&P. maintenance staff and other individuals at various times of the year.
- 3) If the Pioneer Road is built, it will be heavily used. The one-lane road will not be able to handle the volume of traffic very long. By building and staffing an adequate camp, maintenance forces can make many of the upgrades that will be required by the traffic volume.

H) Maintenance Costs - Manpower Needs



- 1) Seasonal
  - a) Tasnuna Station (New Positions)
    - i) 1 WG 52 Foreman
    - ii) 2 WG 53 Operations
    - iii) 1 WG 53 Operator/Mechanic
  - b) Chitina Station
    - i) 2 WG 53 Operators
- 2) Year Round
  - a) Tasnuna Station
    - i) above 4 Positions @ Full-time
    - ii) Plus 1 additional WG 53 Operator and 1 additional WG 54 Operator

I) Toll Program Administration

- 1) Based on estimates of manpower needs for similar checkpoint program on Dalton Highway at \$7,000 per month for a staff of 3.
- 2) Accounting support assumes accounting clerk, range 9, part-time.

J) Average Annual Traffic

- 1) Based on historical traffic generating data for similar sized communities, future growth patterns as demonstrated in the draft Cordova Comprehensive Plan and the area's location relative to major population centers and recreational/resource opportunities. This resulted in an average daily traffic count forecast of 375 vehicles a day, or 11,250 a month based on a 30-day month.
- 2) The average monthly traffic count for a year round rate will be less than a seasonal route. This is because the year round average takes in a 7-month period where historic traffic declines by approximately 60% from the five-month summer period.

K) Capital Costs

- 1) Capital costs for check point construction, maintenance equipment, maintenance station construction, and Pioneer Road would all have to be funded initially from General Funds.
- 2) Capital costs for constructing the Federal Aid Secondary Road would be split 91.35% Federal and 8.65% State General Fund match.
- 3) Costs for Pioneer Road construction could be recovered from the FHWA upon upgrade of this road to Federal Highway Secondary standards. However this recovered cost would come from federal obligation authority which could otherwise be used on other projects.

- L) Toll charges for private vehicles may be able to be lessened by charging on the basis of vehicle gross weight. This would increase the cost to truck traffic, but assumably increase shipping costs as well. Because we have no way to determine gross weight at this time, such a charge schedule would have to wait until traffic data could be collected on the road, so that a determination could be made as to whether or not actual truck traffic was substantial enough to invoke such a schedule. An annual reassessment of toll charges could be done if changes in traffic level, maintenance costs, and/or toll program costs change.
  
- M) Analysis does not include "cost of money."

FISCAL NOTE ANALYSIS OF

HCR 46-COPPER RIVER HIGHWAY TOLL ROAD

COSTS	SEASONAL		YEAR-ROUND	
	PIONEER RD	FED. AID RD.	PIONEER RD.	FED. AID RD
Capital (Total)	\$16,925,000	\$92,255,000	\$18,405,000	\$93,405,000
Toll Check Pt.	50,000	50,000	150,000	150,000
Rd. Construction	15,000,000	90,000,000	15,000,000	90,000,000
Maint. Station	730,000	730,000	1,120,000	1,120,000
Maint. Equipment	1,145,000	1,475,000	2,135,000	2,135,000
Maintenance (Total)	600,000	800,000	1,200,000	1,600,000
Toll Prog. Admin. (Total)	50,000	50,000	120,000	120,000

REVENUES	CAPITAL COSTS		MAINTENANCE COSTS		TOLL PROG. COSTS	
	SEASONAL	YEAR-ROUND	SEASONAL	YEAR-ROUND	SEASONAL	YEAR-ROUND
Pioneer Road	\$16,925,000	\$18,405,000	\$ 600,000	\$ 1,200,000	\$50,000	\$120,000
Pay Back Basis	20 yrs.	20 yrs.	Annually	Annually	Annually	Annually
Annual Pay Back	846,250	920,250	600,000	1,200,000	50,000	120,000
Average Annual Traffic	56,250	135,000	56,250	135,000	56,250	135,000
Per Vehicle Toll	\$15.00	\$7.00	\$11.00	\$9.00	\$.90	\$.90
Federal Aid Road	\$92,255,000	\$93,405,000	\$ 800,000	\$ 1,600,000	\$50,000	\$120,000
Pay Back Basis	20 yrs.	20 yrs.	Annually	Annually	Annually	Annually
Annual Pay Back	4,612,750	4,670,250	800,000	1,600,000	50,000	120,000
Average Annual Traffic	56,250	135,000	56,250	135,000	56,250	135,000
Per Vehicle Toll	\$82.00	\$35.00	\$14.00	\$12.00	\$.90	\$.90

**STATE OF ALASKA  
1988 LEGISLATIVE SESSION**

BILL VERSION: CSH.JR.46

PUBLISH DATE: \_\_\_\_\_

**FISCAL NOTE**

**REQUEST:**

Revision Date: \_\_\_\_\_ Agency Affected: \_\_\_\_\_  
 Title: Exempt aircraft from regulations on BRU: \_\_\_\_\_  
size of registration numbers  
 Sponsor: Rep. Frank Components: \_\_\_\_\_  
 Requestor: \_\_\_\_\_

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	0	0	0	0	0	0
<b>CAPITAL</b>	0	0	0	0	0	0
<b>REVENUE</b>	0	0	0	0	0	0

**FUNDING: (Thousands of Dollars)**

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>	0	0	0	0	0	0

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

**ANALYSIS : (Attach a separate page if necessary)**

\_\_\_\_\_

Prepared by: Rep. Bette Cato, Chairman Phone: 465-4858  
 Division: House Transportation Committee Date: 1/27/88

Approved by Commissioner: Rep. Bette Cato, Chairman *BC* Date: 1/27/88  
 Agency: House Transportation Committee

**Distribution (by preparer):**

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STATE OF ALASKA  
THE LEGISLATURE

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JUNEAU, ALASKA 99811  
907-465-3800

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May, 1988

Copies of minutes listed below were originally included in this file. The minutes are available on the STAIRS database CMPR. In order to save space copies of minutes have not been left in the files.

Mary Van Nimwegen

H. TRANS.

1-27-88

1:30 p.m.

# HOUSE COMMITTEE REPORT

(7)

Date referred: 1/20/88

FURTHER REFERRALS:

DATE: January 27, 1988

The Transportation Committee has considered HJR 46

Requesting the Federal Aviation Administration to exempt aircraft in Alaska from regulations on the size of aircraft registration numbers and on supplemental identification plates.

**RECOMMENDS:**

- replace with CS HJR 46 (TRSD)  the same title
- attached amendment(s)  a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the \_\_\_\_\_ Committee

**ADOPTS:**  \_\_\_\_\_ letter of intent

**ATTACHES NEW FISCAL NOTE(s):**

- fiscal impact  same as previous fiscal note published \_\_\_\_\_
- zero fiscal note  same as previous zero fiscal note published \_\_\_\_\_
- zero with analysis

**SIGNING DO PASS:**

**SIGNING OTHER RECOMMENDATIONS:**

Mike Miller  
Gene Keener  
Johnnie Springer  
Bud Hilde  
Betty Ost  
W.A. Bond

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Betty Ost  
 Chairman's signature



Official Business

## COMMITTEE:

House Transportation Committee

**DATE:** January 27, 1988

# SIGN-IN

## Subject of meeting:

\* HJR 46: Requesting the Federal Aviation Administration to exempt aircraft in Alaska from regulations on the size of aircraft registration numbers and on supplemental identification plates.

**NAME** Please include title **ADDRESS** Please use full address. Please include zip. **PHONE** **REPRESENTING** **DO YOU WANT TO TESTIFY?**

NAME Please include title	ADDRESS Please use full address. Please include zip.	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY?
Reed Stoops	Box 1211 JUNEAU	586-3340	AACVA	Yes
St. J. Frank	Box V JUNEAU			

\* indicates first public hearing