SECRETARY OF COMMUNICATIONS AND TRANSPORT

Official Mexican STANDARD NOM-003-SCT3-2010, which establishes the use within Mexican airspace of the transponder for aircraft, as well as the criteria for its installation, specifications and operating procedures.

In the margin a stamp with the National Coat of Arms, which says: United Mexican States.- Secretariat of Communications and Transportation.- 4.003/DGAC/NOM-003-SCT3-2010.

OFFICIAL MEXICAN STANDARD NOM-003-SCT3-2010, WHICH ESTABLISHES THE USE WITHIN THE AIRSPACE MEXICAN, OF THE TRANSPONDER FOR AIRCRAFT, AS WELL AS THE CRITERIA FOR ITS INSTALLATION, SPECIFICATIONS AND OPERATING PROCEDURES

FELIPE DUARTE OLVERA, Undersecretary of Transportation of the Ministry of Communications and Transportation and President of the National Advisory Committee for the Standardization of Air Transportation, based on articles 36 sections I, IV, VI, XII and XXVII of the Organic Law of Public Administration Federal; 1, 38 section II and IX, 40 sections I, III and XVI and final paragraph, 41, 45, 47, 73 and 74 of the Federal Law on Metrology and Standardization; 1, 4, 6 section III and final paragraph, 7 sections I, V and VI, 7 bis sections IV and VII, 17, 32, 35 and 79 of the Civil Aviation Law; 28, 33, 34 and 80 to 82 of the Regulation of the Federal Law on Metrology and Standardization; 34 section III, 116 section III, VIII, IX and X, 127 and 133 of the Civil Aviation Law Regulations; 2 sections III and XVI, 6 section XIII and 21 sections II, XIII, XV, XXVI and XXXI of the Internal Regulations of the Ministry of Communications and Transport, I have had the good will to order the publication in the Official Gazette of the Federation of the Official Standard Mexican NOM-003-SCT3-2010 approved by the National Advisory Committee for Air Transport Standardization on February 8, 2011 and which regulates the use within Mexican airspace of the aircraft transponder, as well as the criteria for its installation , specifications and operating procedures.

This Official Mexican Standard is published so that it enters into force after the following 60 calendar days, counted from the date of its publication in the Official Gazette of the Federation.

Sincerely

Mexico, DF, February 14, 2012.- The Undersecretary of Transport and President of the Advisory Committee National Standardization of Air Transport, **Felipe Duarte Olvera.-** Heading.

FELIPE DUARTE OLVERA, Undersecretary of Transportation of the Ministry of Communications and Transportation and President of the National Advisory Committee for the Standardization of Air Transportation, based on articles 36 sections I, IV, VI, XII and XXVII of the Organic Law of Public Administration Federal; 1, 38 section II and IX, 40 sections I, III and XVI and final paragraph, 41, 45, 47, 73 and 74 of the Federal Law on Metrology and Standardization; 1, 4, 6 section III and final paragraph, 7 sections I, V and VI, 7 bis sections IV and VII, 17, 32, 35 and 79 of the Civil Aviation Law; 28, 33, 34 and 80 to 82 of the Regulation of the Federal Law on Metrology and Standardization; 34 section III, 116 section III, VIII, IX and X, 127 and 133 of the Civil Aviation Law Regulations; 2 sections III and XVI, 6 section XIII and 21 sections II, XIII, XV, XXVI and XXXI of the Internal Regulations of the Ministry of Communications and Transport, I have had the good will to order the publication in the Official Gazette of the Federation of the Official Standard Mexican NOM-003-SCT3-2010 approved by the National Advisory Committee for Air Transport Standardization on February 8, 2011 and which regulates the use within Mexican airspace of the aircraft transponder, as well as the criteria for its installation , specifications and operating procedures.

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OFFICIAL MEXICAN STANDARD NOM-003-SCT3-2010, WHICH ESTABLISHES THE USE WITHIN THE SPACE AEREO MEXICANO, OF THE TRANSPONDER FOR AIRCRAFT, AS WELL AS THE CRITERIA FOR ITS INSTALLATION, SPECIFICATIONS AND OPERATION PROCEDURES

PREFACE

The Civil Aviation Law establishes the powers of the Ministry of Communications and Transportation in civil aviation, among which is the issuance of Official Standards Mexican and other administrative provisions;

The Civil Aviation Law establishes that in the provision of air transport services, the necessary measures must be adopted to guarantee the maximum safety conditions of the aircraft and its operation, in order to protect the physical integrity of users and their property, as well as that of third parties, for which it attributes to the Ministry of Communications and Transport, the power to require permit holders, concessionaires and air operators to comply with certain requirements, in order to maintain the indicated security levels;

The Civil Aviation Law establishes that the concessionaires and permit holders and, in the case of non-commercial private air transport service, the owners or holders of aircraft, must provide themselves with the necessary technical equipment for the prevention of air accidents and incidents;

The Civil Aviation Law states that civil navigation in the airspace over national territory is governed, in addition to the provisions of said law, by the treaties to which the United Mexican States is a party, being the case that Mexico is a signatory of the Convention. on International Civil Aviation held in the city of Chicago, Illinois, United States of America in 1944, in which Annex 6, Parts I, II, III and Annex 10,
Volume IV establishes the aircraft that must be equipped with a transponder;

Aeronautical operations must be strictly and timely regulated through Official Standards
Mexican mandatory application, in order to guarantee the safety of aircraft, as well as its crew and its passengers;

By having a standard that establishes the use within the Mexican airspace of the transponder for aircraft, as well as the criteria for its installation, specifications and operating procedures, the safety of aircraft is preserved through its correct operation, as well as the safety of people, avoiding irreparable or irreversible damage, since the transponder provides adequate separation in flight, both vertical and horizontal, of the aircraft and allows air traffic services to know, within controlled areas, the position of the aircraft to avoid mishaps and, in an emergency, be able to provide assistance in the shortest possible time, which guarantees a safe operation for the prevention of accidents and air incidents.

In compliance with the procedure established in the Federal Law on Metrology and Standardization (LFMN), for the issuance of Official Mexican Standards, on October 15, 2010, the Official Mexican Standard Project PROY- NOM-003-SCT3-2010, which establishes the use within Mexican airspace of the aircraft transponder, as well as the criteria for its installation, specifications and operating procedures, so that in terms of articles 47 section I and II of the Federal Law on Metrology and Standardization and 33 of its Regulations, the interested parties will submit comments to the Project within a period of 60 calendar days from the date of publication of the Official Mexican Standard Project.

After this period of 60 calendar days, and in compliance with articles 47 sections II and III of the Federal Law on Metrology and Standardization and 33 of its Regulations, they were presented and evaluated by the National Advisory Committee for Air Transport Standardization, the comments to the Official Mexican Standard Project, approving the same, as well as the Official Mexican Standard, being published said response to the comments in the Official Gazette of the Federation on December 7, 2011.

In such virtue and as established in article 47 section IV of the Federal Law on Metrology and Standardization, I have had the good will to issue the following: Official Mexican Standard NOM-003-SCT3-2010, which establishes the use within the Mexican airspace , of the aircraft transponder, as well as the criteria for its installation, specifications and operating procedures.

The following participated in the elaboration of this Official Mexican Standard:

SECRETARY OF COMMUNICATIONS AND TRANSPORTATION.
General Directorate of Civil Aviation.

Navigation Services in the Mexican Air Space.

NATIONAL POLYTECHNIC INSTITUTE.

Higher School of Engineering, Mechanics and Electrical-Ticomán Unit.

ATTORNEY GENERAL OF THE REPUBLIC.
General Directorate of Air Services.

COLLEGE OF MEXICAN AERONAUTICAL ENGINEERS, AC

COLLEGE OF AVIATOR PILOTS OF MEXICO, AC

NATIONAL CHAMBER OF AIR TRANSPORTS.

FEDERATION OF ASSOCIATIONS OF PILOTS AND OWNERS OF AGRICULTURAL AIRCRAFT OF THE MEXICAN REPUBLIC, AC

ASSOCIATION OF AERONAUTICAL ENGINEERS, AC

NATIONAL AIRLINES SA DE CV

AEROLITORAL, SA DE CV

AEROVIAS DE MEXICO, SA DE CV

MEXICAN AVIATION COMPANY, SA DE CV

CONCESSIONAIRE VUELA COMPAÑIA DE AVIACION SA DE CV

AERONAUTICAL SERVICES Z, SA DE CV

TRANSPORTS AEROMAR, SA DE CV

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1. Introduction

The on-board transponder is a transmitter-receiver that, upon receiving an interrogation signal from the ground, automatically activates, issuing an encrypted response. The transponder only issues responses to interrogations received in the mode in which it is set.

The term "mode" is used to describe the type of terrestrial transmission or interrogation used. The types of modes are as follows:

a) Mode 3/A: basic used in ATS. Through it, the identification of the aircraft is transmitted, among other data.

b) Mode C: is the one by which the aircraft transmits the pressure altitude expressed in values of altitude or flight levels to the nearest multiple of 30 meters (100 feet).

c) Intermode:

1) General call in Modes A/C/S: to obtain responses for monitoring transponders in Modes A/C and for the acquisition of transponders in Mode S.

2) General call in Modes A/C only: to obtain responses for monitoring of transponders in Mode A/C. Mode S transponders do not respond to this call.

d) Mode S:

1) All Mode S call only: to obtain responses for Mode S transponder acquisition purposes.

2) Broadcast: to transmit information to all Mode S transponders. No responses are obtained.

3) Selective call: for surveillance of certain Mode S transponders and for communication with them. For each interrogation, a response is obtained only from the transponder to which an exclusive interrogation has been addressed.

Code is understood as the response of the transponder by means of pulses to the interrogators and terrestrial. There are transponders with the capacity to respond in 64 different codes and transponders with the capacity of 4,096 codes.

2. Objective and field of application

The objective of this Official Mexican Standard is to establish the use within Mexican airspace of the aircraft transponder, as well as the criteria for its installation, specifications and operating procedures, and it applies to all concessionaires, permit holders and air operators that operate or intend to operate in accordance with the Civil Aviation Law in Mexican airspace.

3. References

There are no Official Mexican Standards or Mexican standards that are essential to consult for the application of this Official Mexican Standard.

4. Definitions and abbreviations

For the purposes of this Official Mexican Standard, the following definitions and abbreviations are considered:

4.1. Aircraft: Any vehicle capable of autonomous transit in the airspace with people, cargo or mail.

4.2. Ultralight aircraft: Aircraft that has a maximum takeoff weight of not more than 1,000 pounds (454 kg) and is not used for public transportation purposes.

4.3. Airport: Civil public service aerodrome that has adequate facilities and services for the reception and dispatch of aircraft, passengers, cargo and mail from the regular and non-scheduled air transport service, as well as private commercial and private non-commercial transport.

4.4. Pressure altitude: It means the atmospheric pressure expressed in terms of altitude that corresponds at pressure in standard atmosphere.

4.5. ATC: air traffic control.

4.6. ATS: Air traffic service.

4.7. Aeronautical Authority: The Ministry of Communications and Transportation through the General Directorate of Civil Aeronautics.

4.8. Concessionaire: Commercial company constituted in accordance with Mexican laws, to which the Ministry of Communications and Transportation grants a concession for the operation of the regular national public air transportation service, and is for passengers, cargo, mail, or a combination of these, is subject to national routes, itineraries and fixed frequencies, as well as to the registered rates and the schedules authorized by the Secretariat.

4.9. dB: Decibel.

4.10. dBW: Decibels with respect to a watt of power.

4.11. Aircraft Address: A unique 24-bit combination available for assignment to a aircraft, for the purposes of air-ground communications, navigation and surveillance.

4.12. Airship: Any aircraft that is primarily sustained in the air by virtue of its lift by means of a lighter-than-air gas propelled by an engine.

4.13. Applicable provision: Aeronautical technical publications such as: Alerts, Policy Letters, Mandatory Circulars and Advisory Circulars, which must be considered explanatory and regulatory in nature, where appropriate.

4.14. ELM: Extended Length Message.

4.15. Balloon: Any aircraft that primarily sustains itself in the air by virtue of its lift. not motor driven.

4.16. ICAO: International Civil Aviation Organization.

4.17. Air operator: The owner or possessor of a State aircraft, of those included in article 5., section II, subparagraph a) of the Civil Aviation Law, owned or used by the Federation other than military; those of state and municipal governments, and those of parastatal entities, as well as non-commercial private air transport, Mexican or foreign

4.18. Permittee: Moral or physical person, in the case of commercial private air service, national or foreign, to which the Ministry of Communications and Transport grants a permit to carry out its activities, which may be the provision of regular international air transport service. , national and international non-regular and private commercial.

4.19. Glider: Non-engine powered aircraft that primarily derives its lift in flight by aerodynamic reactions on surfaces that remain stationary under given flight conditions.

4.20. Secondary Surveillance Radar (SSR): Surveillance radar system using transmitters/receivers (interrogators) and transponder.

4.21. Recommended: The recommendation of the Aeronautical Authority for the installation of transponders for a certain type of aircraft, but should not be considered as mandatory actions.

4.22. RVSM: Reduced Vertical Separation Minimum.

4.23. Secretary: The Secretary of Communications and Transportation.

4.24. Transponder: Emitter-receiver that generates a response signal when duly interrogated; interrogation and response are made on different frequencies.

5. General provisions

5.1. Any concessionaire, permit holder and air operator that operates or intends to operate in accordance with the Law of Civil Aviation, must comply with the provisions of this Official Mexican Standard.

5.2. Every concessionaire, permit holder and air operator must use a transponder that contributes with ATS and inform collision avoidance systems on board other aircraft.

5.3. This Official Mexican Standard also provides relative information for response codes and different modes of operation.

6. Aircraft that require the installation of a pressure altitude reporting transponder

6.1. Generalities

6.1.1. Since February 1, 2002, all aircraft at the service of concessionaires and permit holders that operate in Mexican airspace must have pressure altitude notification transponders that operate in accordance with the provisions of this Official Mexican Standard.

6.1.2. Since July 1, 2002, all aircraft at the service of air operators that operate in Mexican airspace must be equipped with a pressure altitude notification transponder that works in accordance with the provisions of this Official Mexican Standard.

6.1.3. All aircraft for which the corresponding certificate of airworthiness has been issued for the first time after January 1, 2009, must be equipped with a data source that provides pressure altitude information with a resolution of 7.62 m (25 ft), or better.

6.1.4. As of January 1, 2012, all aircraft must be equipped with a power source. data that provides pressure altitude information with a resolution of 7.62 m (25 ft), or better.

6.1.5. It is recommended that the Mode S transponder be provided with a status indicator in flight/ground if the aircraft is equipped with an automatic device to detect such a condition.

Note 1.- These provisions improve the effectiveness of airborne collision avoidance systems and ATS using Mode S radar. In particular, tracking processes are significantly improved with a resolution of 7.62 m (25 ft) or better.

Note 2.- Mode C responses from transponders should always report pressure altitude with 30.50 m (100 ft) increments regardless of the resolution of the data source.

6.1.6 Unless otherwise provided, the aircraft of air operators operating in VFR flights must be equipped with a pressure altitude notification transponder that works in accordance with the applicable provisions of this Official Mexican Standard.

Note.- The purpose of this provision is to support the effectiveness of ACAS to improve the effectiveness of air traffic services. It is also the intention that aircraft not equipped with pressure altitude reporting transponders should fly in such a way that they do not share the airspace used by aircraft equipped with airborne collision avoidance systems.

6.1.7. Since January 1, 2003, except in the excepted cases provided for in this Official Mexican Standard, all helicopters must be equipped with a pressure altitude notification transponder that functions in accordance with the applicable provisions of this Official Standard. Mexican.

6.1.8. It is recommended that all helicopters be equipped with a pressure altitude reporting transponder that operates in accordance with the applicable provisions of this Official Mexican Standard.

Note.- The purpose of the provisions 6.1.7. and 6.1.8. of this Official Mexican Standard is to support the effectiveness of ACAS and improve the effectiveness of ATS. The dates of entry into force of the ACAS equipment requirements are specified in the applicable regulations and/or provisions that establish the use of the airborne collision avoidance system (ACAS) in fixed-wing aircraft operating in Mexican airspace, as well as her CARACTERISTICS. Also, the purpose of the mentioned provisions is that aircraft that are not equipped with pressure altitude reporting transponders do not fly in the airspace used by ACAS-equipped aircraft. To this end, exemptions from the requirements for pressure altitude reporting transponders may be granted by designating airspace in which such equipment is not required.

6.2. Mode S transponder.

6.2.1. The Mode S transponder must be installed in aircraft equipped with the airborne collision avoidance system (ACAS), in accordance with the regulations and/or applicable provision that establishes the use of the airborne collision avoidance system (ACAS), in aircraft fixed-wing aircraft that operate in Mexican airspace, as well as their characteristics, or in aircraft that operate in regions with RVSM. This does not prevent its installation in any other aircraft.

6.2.2. The Mode S transponder must be capable of performing the functions described below:

a) Mode A identity and Mode C pressure altitude reporting;

b) Intermode and Mode S general call transactions;

c) Transactions for directed surveillance of altitude and identity; **d)**

Blocking protocols;

e) Basic data protocols except the notification on data link capacity;

f) Air-to-air and squitter service transactions;

g) Communications of normal length; **h)**

Notification on data link capacity, and

i) Aircraft identification notification.

6.2.3. For Mode S transponder operation, the SSR address must be available; in accordance with the following principles:

a) At no time should the same address be assigned to more than one aircraft;

b) Each aircraft must be assigned a single address regardless of the composition of the on-board team;

c) The direction must not be changed except in exceptional circumstances and must not be changed during the flight;

d) When an aircraft changes registration status, the assigned address must be abandoned previously and the new registration authority must assign you a new address;

e) The address serves solely for the technical function of addressing and identification of the aircraft and not to transmit any specific information, and

f) Aircraft must not be assigned addresses made up of 24 zeros or 24 ones.

6.3. All the transponders installed in the aircraft of the concessionaires, permit holders and air operators must be inspected and tested every 24 months or according to the maintenance program. In the case of transponders operating in Mode S, it must be verified that the SSR address in Mode S assigned to the aircraft is transmitted by the transponder correctly according to said address. The tests in reference must be carried out by an aeronautical workshop with the corresponding capacity, in accordance with the provisions of articles 135, section II, and 140 of the Civil Aviation Law Regulations. The tests carried out on the transponders must comply with the procedures established in the regulations and/or applicable provision that regulates the maintenance of the airworthiness of aircraft, basic body, in the case of helicopters, engines, propellers, components and accessories.

6.4. Other aircraft that, due to their type, activity, class of operating airspace, as well as their special characteristics, among other aspects, may be exempted from compliance with this Official Mexican Standard, for which the corresponding studies must be carried out. include the following:

a) Make, model, serial number and registration of the aircraft;

b) Technical characteristics or specifications of the aircraft;

c) Technical study of the aircraft and its operating characteristics that justifies the non-installation of the transponder;

d) Classes of airspace in which the aircraft is intended to operate;

e) Activity to which the aircraft operation is dedicated;

f) Revisions or amendments to the flight, maintenance or other applicable manuals that are affected by the non-installation of the transponder; Y

g) Considered alternative methods that allow maintaining an equivalent level of security in the air operations in the absence of the use of the transponder.

6.5. Secondary Surveillance Radar (SSR).

6.5.1. When an SSR is installed and maintained in operation as an aid to the ATS, it must be adjusted to what is prescribed in the corresponding section of this Official Mexican Standard.

Note.- As indicated in this standard, transponders in Modes A/C and S are those that have the characteristics prescribed in numeral 6.5.2. of this standard. The functions that Mode A/C transponders can perform are integrated into Mode S transponders.

6.5.2. Interrogation modes (ground to air): ATS

interrogation is carried out using modes A, C and S, which are applied as follows:

a) Mode A: To obtain transponder responses for identification and surveillance purposes. **b)** Mode C:

to obtain transponder responses for automatic transmission of pressure altitude and for surveillance purposes.

c) Intermode:

i) All Call in Modes A/C/S: to obtain transponder surveillance responses in Modes A/C and for Mode S transponder acquisition.

ii) General call in Modes A/C only: To obtain responses for transponder surveillance in Modes A/C. Mode S transponders do not respond to this call.

d) Mode S:

i) All Mode S Call: to obtain responses for Mode S transponder acquisition purposes.

ii) Broadcast: to transmit information to all Mode S transponders. No responses are obtained.

iii) Selective calling: for surveillance of certain Mode S transponders and for communication with them. For each interrogation, a response is obtained only from the transponder to which an exclusive interrogation has been addressed.

6.5.3. Using Mode S interrogations removes the role of Mode S transponders. A/C and they don't respond.

6.5.4. There are 25 possible query formats (ascending) and 25 possible response formats. (downstream) in S Mode.

6.5.5 It must be coordinated through the implementation of this Official Mexican Standard those aspects of application of the SSR that allow its optimal use.

Note.- In order to allow the efficient operation of ground equipment designed to eliminate interference from unwanted responses of the aircraft transponder to adjacent interrogators (unwanted signal eliminator equipment), coordinated plans for the assignment of Pulse Repetition Frequencies (PRFs) to SSR interrogators, where applicable.

6.5.6. The assignment of interrogator identifier (II) codes, when necessary in overlapping coverage areas, across international boundaries of flight information regions, will be the subject of regional air navigation agreements.

6.5.7. The assignment of surveillance identifier (SI) codes, when necessary in overlapping coverage areas, will be subject to regional air navigation agreements.

6.5.8. The SI blocking facility can only be used if all Mode S transponders within coverage area, are equipped for this purpose.

6.5.9. Questions must be provided in Mode A and in Mode C.

Note.- This requirement can be satisfied by interrogations in intermode that obtain responses in Mode A and Mode C of A/C transponders.

6.5.10. In areas where better aircraft identification is necessary to improve the effectiveness of the ATC system, SSR ground facilities that possess Mode S characteristics must have aircraft identification capability.

Note.- The notification corresponding to the identification of aircraft through data links in Mode S provides a means for the unambiguous identification of aircraft with appropriate equipment.

6.5.11. Sidelobe suppression command interrogation:

a) Sidelobe suppression should be provided for all Mode A, Mode C, and Mode A interrogations.
intermode.

b) The side lobes must be suppressed, in accordance with the provisions of subparagraph a) of this numeral, of all mode S only all-call interrogations.

6.5.12. Transponder response modes (air to ground):

a) Transponders must respond to Mode A interrogations of Mode C interrogations.

b) If pressure altitude information is not available, transponders respond to Mode C interrogations with frame pulses only.

6.5.12.1. Pressure altitude reports contained in Mode S responses are derived as
is indicated below:

6.5.12.1.1. The response to a Mode A interrogation should consist of the two frame pulses spaced 20.3 µs apart as the most elementary code; plus information pulses (Mode A Code) spaced at 1.45 µs intervals from the first frame pulse.

Note.- The Mode A code designation is a four-digit sequence of numbers between 0 and 7, inclusive.

6.5.12.1.2. The Mode A code must be manually selected from among the 4,096 available codes.

6.5.12.1.3. The response to Mode C interrogations consists of the two frame pulses with a spacing of 20.3 µs as the most elementary code. When digitized pressure altitude information is available, the information pulses spaced at 1.45 µs intervals from the first frame pulse should also be transmitted.

6.5.12.1.4. Transponders must have means to remove the information pulses but to retain the frame pulses when the pressure altitude transmission is not met when replying to the Mode C interrogation.

6.5.12.1.5. The information pulses must be automatically selected by an analog-digital converter, connected to a pressure altitude data source, on board the aircraft, referred to the altimetric setting type 1 013.25 hectopascals.

Note 1.- The pressure setting of 1,013.25 hectopascals is equivalent to 29.92 inches of mercury.

Note 2.- The transmission of pressure altitude refers to responses in Mode C and it specifies, among other things, that reports on pressure altitude in Mode C refer to the standard altimetric setting of 1 013.25 hectopascals. The provision contained in 6.5.12.1. of this standard is to ensure that all transponders report uncorrected pressure altitude, not just Mode C transponders.

6.5.13. When the need for suitability for automatic Mode C pressure altitude transmission has been determined within a specified airspace, transponders, when used within the airspace concerned, must also respond to interrogations in the specified airspace. Mode C with encoding of the pressure altitude in the information pulses.

a) Since February 1, 2002, all transponders, regardless of the airspace in
used, must respond to Mode C interrogations with pressure altitude information.

b) Since January 1, 1999, all transponders, regardless of the airspace in
used, must respond to Mode C interrogations with pressure altitude information.

Note.- The effective operation of the airborne collision avoidance system (ACAS) depends on whether the aircraft intruder reports pressure altitude in its Mode C responses.

c) For aircraft equipped with pressure altitude sources of 7.62 m (25 ft) or better, pressure altitude information provided by Mode S transponders in response to selective interrogations (i.e. in the AC field, Altitude Code) should be reported in 7.62 m (25 ft) increments.

Note.- ACAS performance is considerably improved when an intruder aircraft reports the
pressure altitude with 7.62 m (25 ft) increments.

d) All Mode A/C transponders installed since January 1, 1992 must notify the pressure altitude encoded in the information pulses of Mode C responses.

e) All Mode S transponders installed since 1 January 1992 must report the pressure altitude encoded in the information pulses of Mode C responses and in the AC field of Mode S responses.

6.5.14. When a Mode S transponder is not receiving further pressure altitude information from a source with a quantization of 7.62 m (25 ft) or better increments, the reported value will be that obtained by expressing the measured value of altitude aircraft uncorrected pressure in 30.48 m (100 ft) increments and the Q bit shall be set to 0, i.e. Q=0 is used to indicate that altitude is reported in 100 ft increments and Q= 1 is used to indicate that the altitude is reported in 25 ft increments.

Note.- This requirement relates to the installation and use of the Mode S transponder. The requirement is intended to ensure that altitude data obtained from a source in 30.48 m (100 ft) increments is not report using formats intended for data with 7.62 m (25 ft) increments.

6.5.15. Transponders used in part of the airspace where it has been established that Mode S airborne equipment is required, should also respond to intermode and Mode S interrogations.

a) The requirement to have SSR Mode S transponders on board is determined by regional air navigation agreement, which also specifies the part of the airspace in which they are applied and the implementation schedule.

b) In the agreements mentioned in subparagraph a) of this numeral, a period of five years is granted from the entry into force of this Official Mexican Standard or of the agreements.

6.5.16. Response code in Mode A (information impulses).

a) All transponders must have the ability to generate 4,096 response codes.

b) The following Mode A codes are reserved for special uses:

- The code 7,700 to be able to recognize an aircraft in a state of emergency.
- The code 7,600 to be able to recognize an aircraft with a radio communication failure.
- The code 7,500 to be able to recognize an aircraft that is the object of unlawful interference.

6.5.17. Arrangements must be made for the ground decoder equipment to immediately recognize codes 7,500, 7,600 and 7,700 in Mode A.

6.5.18. The code 0000 in Mode A is reserved to be assigned, through regional agreements, for general uses.

6.5.19. Code 2,000 is reserved in Mode A to be able to recognize an aircraft that has not received instructions from ATC units to activate the transponder.

6.5.20. Airborne Mode S transponder capability. The functions of transponders in Mode S must correspond to one of the following five levels:

a) Level 1: Level 1 transponders must have the capacity to perform the functions described for:

- Mode A identity and Mode C pressure altitude reporting;
- Intermode and Mode S general call transactions;
- Transactions for directed altitude and identity surveillance;
- Blocking protocols;
- Basic data protocols except data link capability notification, and
- Air-to-air and squitter service transactions.

Level 1 enables SSR surveillance based on Mode A identity code and pressure altitude reporting. In a Mode S SSR environment, technical performance is better than that of Mode A/C transponders; because in Mode S selective interrogation of aircraft is possible.

b) Level 2: Level 2 transponders must have the ability to perform the functions described for Level 1, and also those prescribed for:

- Normal length communications (COM-A and COM-B);
- Notification on data link capability, and
- Aircraft identification notification.

Level 2 allows for aircraft identification reporting and other normal length data link communications, both ground-to-air and air-to-ground. The aircraft identification reporting capability requires an interface and an appropriate data input device.

c) Level 3: Level 3 transponders must have the ability to perform the functions described for Level 2, and also those prescribed for ELM ground-to-air communications.

Level 3 allows for extended length data link ground-to-air communications and thus the extraction of information from ground-based data banks, as well as the reception of data from all ATS that cannot be obtained through the Level 2 transponders.

d) Level 4: Level 4 transponders must have the ability to perform the functions described for Level 3, and also those prescribed for ELM air-to-ground communications.

Level 4 enables extended length data link air-to-ground communications and thus can provide ground access to airborne data sources and transmission of other data specified by ATS and not obtainable through Level 2 transponders.

e) Level 5: Level 5 transponders must have the capacity to perform the functions described for Level 5, and also those prescribed for enhanced communications of both COM-B and ELM messages.

Layer 5 allows COM-B and extended length data link communications with multiple interrogators, without requiring the use of multi-site reservations. This Transponder Level offers a data link capability, which is superior to that of the other transponder levels.

6.5.21. Extended Squitter: Extended squitter transponders must be capable of performing the functions described for Levels 2, 3, 4 or 5 and also those prescribed for extended squitter operation. Transponders with this capability are designated with an "e" suffix. For example, a Level 4 transponder with extended squitter capability is designated "Level 4e".

6.5.22. SI Capability: Transponders capable of processing SI codes must be capable of performing the functions described for Levels 2, 3, 4 or 5 and also those prescribed for SI code operation. Transponders with this capability are designated by the suffix "s". For example, a Level 4 transponder with extended squitter capability and SI capability is designated "Level 4es".

6.5.23. SI code capability shall be provided in accordance with the provisions of the preceding paragraph for all Mode S transponders installed since January 1, 2003, and for all Mode S transponders since January 1, 2005.

Note.- Some countries may require a different application.

6.5.24. Non-transponder devices, which emit extended squitter signals. Devices capable of emitting extended squitter but not part of a Mode S transponder must comply with all 1 090 MHz RF signal-in-space requirements specified for a Mode S transponder, except in the case of transmit power levels for the identified equipment class, as specified in the Automatic Dependent Surveillance Broadcast-Broadcast (ADS-B out) requirements.

6.5.25. Mode S transponders used in international civil air traffic must comply with the provisions for Level 2 prescribed in subparagraph b) of numeral 6.5.17 of this Official Mexican Standard.

Note 1.- The use of Level 1 may be allowed in certain countries or under a regional air navigation agreement. The Level 1 Mode S transponder comprises the set of features that ensure the compatible operation of Mode S transponders with Mode S SSR interrogators. This Level is defined to prevent proliferation of transponder types below Level 2, that are incompatible with SSR Mode S interrogators.

Note 2.- The objective of having Level 2 capacity is to guarantee the widespread use of transponders with capacity in accordance with ICAO standards, so that Mode S terrestrial facilities and services can be planned worldwide. Another objective is to discourage the initial installation of Level 1 transponders, which will become obsolete if some parts of the airspace are later required to use transponders with Level 2 capability.

6.5.26. Mode S transponders installed on aircraft with a maximum takeoff weight greater than 5,700 kg or a maximum cruise speed greater than 463 km/h (250 kt), must operate with antenna diversity, if:

a) The Certificate of Airworthiness of the aircraft was issued for the first time since January 1, 1990, or

b) Are required by virtue of a regional air navigation agreement, in accordance with the numerals 6.5.2. and 6.5.15. of this Official Mexican Standard.

c) Aircraft with a maximum true cruising speed greater than 324 km/h (175 kt) must operate with a peak power of not less than 21.0 dBW.

6.5.27. Capacitance reporting on Mode S squitters.

Notification of capability must be provided in Mode S acquisition squitters (unsolicited downlink transmissions), for all Mode S transponders installed on or after January 1, 1995.

6.5.28. Transponders equipped for extended squitter operation must have a means of disabling acquisition squitters when extended squitters are being emitted.

Note.— This facilitates acquisition squitter suppression if all ACAS units are converted to receive the extended squitters.

6.5.29. ELM transmit power.

To facilitate conversion of existing Mode S transponders to full Mode S capability, transponders originally manufactured after January 1, 1999 should be allowed to transmit 16-segment ELM bursts at 20 dBW.

Note.- This represents a tolerance greater than 1 dB with respect to the specified required power.

6.5.30. SSR Address required in Mode S (aircraft address).

The Mode S SSR address must be one of the 24-bit aircraft addresses allocated by the ICAO to the Aeronautical Authority and assigned as prescribed by said Organization.

6.6. Specifications on the installation of the transponder.

6.6.1. Any transponder intended to operate within Mexican airspace that is not part of the aircraft type certificate must comply with the specifications and installation procedures of numeral 6.6. of this standard must be duly installed in accordance with article 145 of the Regulations of the Civil Aviation Law.

6.6.2. In the case of aircraft with Mexican nationality and registration marks, for the installation of the transponder in the aircraft, the technical regulations issued by the state of design must be taken as a basis, as long as it is also the owner, possessor or has validated the Certificate. of the type of the aircraft on which it is intended to install or have such equipment installed.

6.6.3. The concessionaire, permit holder and air operator must have the brand, model and part number of the equipment, as well as the data of the aircraft in which the transponder is to be installed, as well as the engineering documentation for the installation of the equipment. which should contain the following:

a) Location plans of the transponder and its components. **b)** Electrical

diagrams, with their corresponding load analysis.

c) Technical justification of the modification to be made to the aircraft (structural, if applicable, instrument panel, electrical wiring, among others).

d) Supplement to the Flight Manual.

e) Review of the aircraft maintenance program and the General Maintenance Manual, if applicable to the latter. **f)** Revision to the Minimum Equipment List of the aircraft. **g)** Test Guide. **h)** Review of the General Operations Manual, if applicable.

6.6.4. It is the responsibility of the concessionaire, permit holder and air operator to determine the new weight and center of gravity of the aircraft after the modification, in accordance with the regulations and/or applicable provision that regulates the maintenance of aircraft airworthiness, basic body for the case of helicopters, engines, propellers, components and accessories.

6.6.5. For aircraft that on the date of entry into force of this Official Mexican Standard already have transponders installed and that do not have the equipment certification, the concessionaires, permit holders and air operators must review the equipment installation documentation as required in this standard, as well as carry out a physical inspection of your aircraft in order to verify that it complies with what is specified in numeral 6.6.3. of this Official Mexican Standard.

6.6.6. Concessionaires, permit holders and air operators must take into consideration that on the date of entry into force of this Official Mexican Standard, the transponders required by it, may already be previously installed in their aircraft, or considered by their type certificate, In accordance with the installation procedures of any civil aviation authority, or for those who, complying with the corresponding regulations, intend to install them abroad, the concessionaire, permit holder and air operator, as appropriate, must comply with what is indicated in subparagraphs d) to h) of numeral 6.6.3. of this Official Mexican Standard.

6.6.7. Concessionaires, permit holders and Mexican air operators that operate aircraft with different nationality and registration marks than the Mexican ones, must comply with the installation requirements established by their state of registration.

6.6.8. Permit holders and foreign air operators that operate aircraft with nationality markings other than Mexican ones must comply with the installation requirements established by their state of registration.

6.6.9. It is the responsibility of the concessionaire, permit holder and air operator to ensure that prior to its operation, the installed transponder complies with the provisions of section 6.6 of this Official Mexican Standard.

6.6.10. Aircraft with a Mexican nationality mark and registration must comply with the certification of the installation of the transponder equipment in accordance with the provisions of numeral 10 of this Official Mexican Standard.

6.7. Operating procedures.

6.7.1. The transponder must remain operational during the entire flight time of the aircraft.

6.7.2. Pilots must operate transponders in accordance with ATS instructions.

6.7.3. If there are no instructions from the ATS, the code of the transponder of agree to the following:

a) 0000 in Mode A to be assigned, through regional agreements, for general uses.

b) 1,200: aircraft with a visual flight plan.

c) 1,500: helicopters.

d) 2,000: aircraft with an instrument flight plan that have not received instructions to activate some specific code.

e) 7,500: aircraft that are subject to unlawful interference.

f) 7,600: aircraft with radio communication failure.

g) 7,700: aircraft in emergency.

6.7.4. The ATS may consider exceptions to the provisions of numeral 6.7.1. of this Standard Mexican Official, for:

a) Allow an aircraft whose transponder has broken down in flight to continue to the airport destination or to proceed to a place where it can be repaired.

b) Allow the operation of an aircraft with the automatic altitude transmitter inoperative, but with the operational transponder.

c) Allow the operation of an aircraft without any operational transponder from an airport where it cannot be repaired to the destination airport, including intermediate stops, if the ATS allows it before the operation. The operation of the aircraft is not allowed if it is not repaired at the destination airport.

d) Concessionaires, permit holders and air operators, who have an MEL and who intend to carry out operations in accordance with the exceptions of subparagraphs b) and c) of numeral 6.7.4. of this standard, it is recommended that they have been previously considered in the MEL of the
aircraft.

6.7.5. All transponder test operations must be carried out under the guidelines established by the equipment manufacturer and by the regulations and/or applicable provisions that regulate the maintenance of aircraft airworthiness, issued by the Secretariat.

7. Degree of agreement with international standards and guidelines and with Mexican standards taken as the basis for its elaboration

7.1. This Official Mexican Standard is consistent with article 37 of the Convention on International Civil Aviation and with the standards and methods recommended in Annex 6, Part I, Chapter 6, Number 6.19., Annex 6, Part II, Chapter 2, Number 2.4. 13., Chapter 3, Number 3.6.11., Annex 6, Part III, Section II, Chapter 4, Number 4.13., Section III, Chapter 4, Number 4.9. and Annex 10 Volume IV, Chapter 2, issued by the International Civil Aviation Organization.

7.2. There are no Mexican standards that have served as the basis for its preparation, since at the moment there are no precedents in this regard.

8. Bibliography

8.1. International Civil Aviation Organization, Document 7300 - Convention on International Civil Aviation, [online], 1944, Chicago, United States of America, Ninth Edition – 2007, [cited 04-15-2010], Available on the Internet: http:/ /www.icao.int.

8.2. International Civil Aviation Organization, Annex 6, Part I, to the Convention on International Civil Aviation, December 10, 1948, Chicago, United States of America, Amendment 33-B, Eighth Edition – July 2001, [cited 04-15-2010], Convention on International Civil Aviation.

8.3. International Civil Aviation Organization, Annex 6, Part II, to the Convention on International Civil Aviation, December 2, 1968, Chicago, United States of America, Amendment 28, Seventh Edition – July 2008, [cited 04-15-2010], Convention on International Civil Aviation.

8.4. International Civil Aviation Organization, Annex 6, Part III, to the Convention on International Civil Aviation, 1979, Chicago, United States of America, Amendment 14-B, Sixth Edition–July 2007, [cited 04-15-2010], Convention on International Civil Aviation.

8.5. International Civil Aviation Organization, Annex 10, Volume IV, to the Convention on International Civil Aviation, May 30, 1949, Chicago, United States of America, Amendment 84, Fourth Edition–July 2007, [cited 04-15-2010], Convention on International Civil Aviation.

8.6. Federal Aviation Administration of the United States of America, Part 121 “Operating requirements: Domestic, flag, and supplemental operations”, [online], 1958, United States of America, Edition – 2009, [cited 04-15-2010] , Title 14 “Aeronautics and Space” of the Code of Federal Regulations of the United States of America, available on the Internet: http://www.faa.gov.

8.7. Federal Aviation Administration of the United States of America, Part 135 “Operating requirements: Commuter and on demand operations and rules governing persons on board such aircraft”, [online], 1978, United States of America, Edition – 2009, [cited 04-15-2010], Title 14 “Aeronautics and Space” of the Code of Federal Regulations of the United States of America, available on the Internet: http:// www.faa.gov.

9. Observance of this rule

9.1. The monitoring of compliance with this Official Mexican Standard corresponds to the Aeronautical Authority.

10. Conformity assessment

10.1. It is the authority of the Aeronautical Authority to verify compliance with the regulatory administrative provisions, both national and international, that guarantee the operational safety of civil aircraft, as well as its authority to verify that the specifications and technical procedures of this Standard are complied with. Mexican Official, regarding the establishment of the use within the Mexican airspace, of the transponder for aircraft, as well as the criteria for its installation, certification and operating procedures.

10.2. Concessionaires, permit holders and air operators will be subject to conformity assessment and, where appropriate, verification for the purpose of issuing the Transponder Certificate referred to in these Procedures.

10.3. When concessionaires, permit holders and air operators request that the conformity assessment of their aircraft be formulated, with respect to the specifications and technical procedures related to the establishment of the mandatory use within Mexican airspace, of the aircraft transponder, as well as the criteria for its installation, certification and operating procedures, provided for in this standard, must prepare and submit to the Standards and Certification Engineering Directorate, dependent on the General Directorate of Civil Aeronautics, the request in free writing indicating the name, name or company name of the person or persons who promote, where appropriate their legal representative, address to receive notifications, as well as the name of the person or persons authorized to receive them, the request that is made, the facts or reasons that give rise to the request, the administrative body to which they are addressed and the place and date of their issuance. The document must be signed by the interested party or their legal representative, in case they do not know or cannot sign, their fingerprint must be printed. With the aforementioned document, the documentation listed below must be attached, and the aeronautical authority must be informed of its willingness to be evaluated within the provisions of this Official Mexican Standard:

a) Power of attorney(s) of the legal representative(s) (1 original or 1 certified copy).

b) Writing indicating the make and model of the aircraft, serial number assigned by the manufacturer and year of manufacture (1 original).

c) Submit the documentation referred to in section 6.6.3. of this standard, when applicable, (1 original) or, where appropriate, for those applicants for the transponder installation exception, submit the requirements indicated in numeral 6.6. of this Official Mexican Standard.

10.4. To be able to exempt compliance with this Official Mexican Standard, you must Attach to your request the documentation indicated in numeral 6.4. of this Official Mexican Standard.

10.5. In order to comply with the operation requirement of numeral 6.2.3. of this regulation, the concessionaire, permit holder and air operator must have the corresponding SSR address, assigned by the Aeronautical Authority, and must prepare and submit to the Aviation Directorate, under the General Directorate of Civil Aeronautics, the request in free writing indicating the name, denomination or company name of the person or persons who promote, if applicable, their legal representative, address to receive notifications, as well as the name of the person or persons authorized to receive them, the request that is made, the facts or reasons that They give reason for the request, the administrative body to which they are addressed and the place and date of their issuance. The document must be signed by the interested party or their legal representative, in case they do not know or cannot sign, their fingerprint must be printed. With the aforementioned writing, the documentation listed below must be attached, and manifest to the Aeronautical Authority your willingness to be evaluated within the provisions of this Official Mexican Standard:

a) Power of attorney(s) of the legal representative(s) (1 original or 1 certified copy).

b) Writing indicating the brand and model of the aircraft, serial number assigned by the manufacturer and year of manufacture (1 original).

c) Submit the corresponding airworthiness certificate for each aircraft that requires the SSR address.

Once the complete application has been received, the aeronautical authority must resolve the application within the term established in the following numeral in order to carry out the verification and evaluation of conformity with compliance with this Official Mexican Standard.

10.6. Response time:

Three months counted from the date on which the duly integrated application was submitted.

If at the end of the maximum response period, the Authority has not responded, it will be understood that the request was resolved negatively to the petitioner.

Legal basis: Article 17, Federal Law of Administrative Procedure.

The Authority has a maximum period of 30 calendar days from the date of submission of the application to request the missing information from the petitioner.

10.7. To comply with the provisions of section 10.2. of this standard, the concessionaire, permit holder, and air operator must have the corresponding information, mentioned in the application to certify the installation of the equipment, described in Regulatory Appendix “A” of this Official Mexican Standard.

11. Validity

11.1. This Official Mexican Standard will enter into force 60 calendar days after its publication in the Official Gazette of the Federation.

Mexico City, February 14, 2012.

REGULATORY APPENDIX "A"

APPLICATION TO CERTIFY THE EQUIPMENT INSTALLATION

DATE: __(1)___OF_____(2)_____OF 20_(3)__ ___

INSTALLATION TO CERTIFY (4)

☐ ELT ☐ XPDR ☐ GPWS ☐ ACAS/TCAS
☐ CVR ☐ fdr ☐ HF ☐ VHF
☐ GPS

TEAM INFORMATION:

BRAND: (5)___
MODEL: (6)____
PART NUMBER: (7)_____
SERIAL NUMBER: (8)__ ____

AIRCRAFT INFORMATION:

BRAND: (9)___ MODEL: (10)___
REGISTRATION: (11)_____ SERIAL NUMBER: (12)_____
NATIONALITY: _(13)____

DOCUMENTATION SUBMITTED IN SINGLE COPY (14)

☐ MANUFACTURER LIST ☐ FAA FORM 337 ☐ DGAC FORM 46
☐ OTHER SPECIFY: __(15)___ ____

OWNER INFORMATION:

☐ NATURAL PERSON (16) ☐ LEGAL PERSON (17)
OWNER'S NAME / FULL COMPANY NAME:
(18)
ADDRESS: (19)___
CITY: (20)____ STATE: (21)___ ZIP CODE: (22)_____
PHONE: (23)____ EMAIL: (24)_____ ____

SERVICE TO WHICH IT IS DESTINED: (25)

☐ AIR TAXI ☐ COMMERCIAL ☐ FREIGHTER
☐ PRIVATE ☐ GOVERNMENTAL ☐ OTHER
SPECIFY: (26)___ ____

_____(27)___
NAME AND SIGNATURE OF THE PROMOVANT

Note: An application must be completed for each equipment installation that is certified

APPLICATION TO CERTIFY THE EQUIPMENT INSTALLATION

(INSTRUCTIONS FOR FILLING AND SUBMISSION)

a) General considerations for filling out the application to certify the installation of the equipment: The application must be filled out in a typewriter or by hand with legible print letters.

Use ink, preferably black.

Deletions or amendments are not allowed.

Copies of the application are available at the filing window of the procedure.

It must be presented in original.

It must be filled out in its entirety, otherwise it will not be received, considering the following filling guide:

Box 1: Clearly write down the day of the month on which the request is made.

Box 2: Clearly write down the month in which the request is made.

Box 3: Clearly write down the year in which the request is made.

Box 4: Indicate with an "X" inside the box, the option of the equipment that you want to certify your installation.

Box 5: Clearly write down the brand of the equipment that was installed.

Box 6: Clearly write down the model of the equipment that was installed.

Box 7: Clearly write down the part number of the equipment that was installed.

Box 8: Clearly write down the serial number of the equipment that was installed, if you do not have the part number.

Box 9: Clearly write down the make of the aircraft in which the equipment was installed.

Box 10: Clearly write down the model of the aircraft in which the equipment was installed.

Box 11: Clearly write down the registration of the aircraft in which the equipment was installed, if there is no assigned registration, write down the legend "registration in process of assignment".

Box 12: Clearly write down the serial number of the aircraft in which the equipment was installed.

Box 13: Clearly write down the nationality of the aircraft in which the equipment was installed.

Box 14: Indicate with an "X" inside the box, the option of the documentation that you present in simple copy to endorse the certification of the installation of the equipment.

Box 15: If the "other" option in box 14 has been selected, describe which one
It is the documentation that is presented to endorse the certification of the installation of the equipment.

Box 16: Indicate with an "X" inside the box, if the owner is a natural person.

Box 17: Indicate with an "X" inside the box, if the owner is a legal entity.

Box 18: Clearly write down the full name or company name of the owner.

Box 19: Clearly write down the full address of the owner.

Box 20: Clearly write down the City.

Box 21: Clearly write down the State.

Box 22: Write clearly the Postal Code.

Box 23: Clearly write down the telephone number of the owner.

Box 24: Clearly write down the email address of the owner.

Box 25: Indicate with an "X" inside the box, the service option for which the aircraft is intended.

Box 26: If the "other" option in box 25 has been selected, describe which one
is the service for which the aircraft is intended.

Box 27: Indicate the full name of the petitioner of the procedure, as well as its signature.

b) Windows for submitting the procedure:

Engineering, Standards and Certification Department.

Providencia Street 807, 3rd. floor,

Col. Del Valle, CP 03100,

Mexico DF

Hours of operation: 9:00 a.m. to 2:00 p.m., Monday through Friday.

c) Legal-administrative basis of the procedure:

Conformity assessment procedure indicated in numeral 10.5. of the Official Standard Mexican NOM-003-SCT3-2010, in force.

d) Attached documents:

The request must be prepared and submitted to the Engineering, Standards and Certification Directorate, dependent on the General Directorate of Civil Aeronautics, the request in free writing indicating the name, denomination or company name of who or who promote, in his case of his legal representative, address to receive notifications, as well as the name of the person or persons empowered to receive them, the request that is made, the facts or reasons that give rise to the request, the administrative body to which they are addressed and the place and date of their issuance. The document must be signed by the interested party or their legal representative, in case they do not know or cannot sign, their fingerprint must be printed. Likewise, with the aforementioned document, the documentation listed below must be attached, and the Aeronautical Authority must be informed of its willingness to be evaluated within the provisions of this Official Mexican Standard:

i) Power of attorney(s) of the legal representative(s) (1 original or 1 certified copy).

ii) Application to certify the installation of the equipment duly completed.

iii) Copy of the corresponding document that supports the installation of the transponder in the aircraft, which they are listed in box 25 of the format to certify the installation of the equipment as the case may be.

e) Response time:

Response time 3 months.

Following calendar days, counted from the one in which the application was submitted.

Legal basis: Article 17, Federal Law of Administrative Procedure.

If at the end of the maximum response period, the authority has not responded, it will be understood that the request was resolved in the negative.

The authority has a maximum period of 30 calendar days to request the missing information from the individual.

f) Telephone number and email for inquiries about the procedure:

Ministry of Communications and Transportation
General Directorate of Civil Aviation

Engineering, Standards and Certification Address Calle

Providencia 807, 3rd. floor, Col. Del Valle, Mexico, DF

Hours of operation: 9:00 a.m. to 2:00 p.m., Monday through Friday

Telephones: 50 11 64 08 and fax 55 23 62 75 Email:

acanogal@sct.gob.mx **g) Telephone number for**

complaints:

In the event that there is a problem in the care of the procedure, the complaint or complaint can be filed at:

Internal control organ

Xola s/n, 1st floor, Body "A", West Wing
Cologne: Narvarte

Postal code: 03028, Mexico, District, Federal Telephone(s):

55192931 Opening hours for the public: from 9:00 a.m. to

3:00 p.m. Monday through Friday.

From 5:00 p.m. to 6:00 p.m., Monday through Friday.

Public Function Secretary

SACTEL

In the Federal District: 1454-2000

Inside the Republic: 01 800 112 05 84

From the United States: 1 800 475-2393

Email: sactel@funcionpublica.gob.mx, quejas@funcionpublica.gob.mx