

Confusion With Leased Aircraft Markings and Callsigns

Presented by PLC

SUMMARY

The framework for the operation of leased aircraft globally, should include specific instructions regarding pilot's responsibilities on initial contact with Air Traffic Services Units (ATSUs). Flights which use aircraft (and crews) from different airlines, but still use the same callsign may present confusion at an aerodrome when an Air Traffic Control Officer (ATCO) issues traffic information.

1. INTRODUCTION

- 1.1. Aircraft leasing activities are often complex and consist of “across borders” arrangements that facilitate airlines and aircraft operators fulfilling their capacity demands. Leasing arrangements typically involve multifaceted coordination with external and internal stakeholders such as Departments and Ministries of Transport, Civil Aviation Authorities and foreign authorities. “Interchanged” or “leased” aircraft are usually facilitated by detailed application processes taking into account technical, regulatory, legal and commercial considerations.¹
- 1.2. A lease can be understood to be a contractual arrangement whereby a properly licensed air operator gains commercial control of an entire aircraft without transfer of ownership². The term “leased aircraft” is also referred to as “interchanged aircraft”. The two general types of lease agreements are a dry lease and a wet lease³. A dry lease involves the lease of an aircraft without any crew members. A wet lease means that the aircraft owners will provide one or more crew members to the lessee along with the aircraft. Each scenario creates a different level of situational awareness for an ATCO who may be issuing traffic information with either of those types of flights involved.
- 1.3. Leased aircraft not bearing the colours/ markings of the company operating the aircraft can pose a challenge for air traffic control. ATCOs are required to use visual and other methods to separate aircraft and issue traffic information to pilots about other aircraft operating in their vicinity. Some ATCOs often issue traffic information based on their familiarity with the airline's associated colours and markings (the aircraft livery). If the ATCO is unaware that an aircraft was leased, there may be confusion with the traffic

¹ IATA Guidance Material and Best Practices for Aircraft Leases, 4th Edition; Scope pg. XV

² ICAO Doc 8335/AN879, 5th Edition; Glossary

³ Retrieved from <https://www.caa.co.uk/commercial-industry/aircraft/leasing/aircraft-leasing/>

information being passed if it includes the airline's colours and/or markings but the actual aircraft was leased, i.e., bears a different livery.

- 1.4. There are some jurisdictions that experience challenges with leased aircraft. Whilst there does not appear to be any major or significant incidents that have been attributed to callsign mix up owing to confusion with leased aircraft there have been instances where leased aircraft were incorrectly identified during the passing of traffic information. As such, this issue poses a potential risk, especially given the trend towards the use of more and more leased aircraft for airline operations. Data collection on the number of errors occurring with leased aircraft is a necessary step in determining the level of risk that exists. This paper will explore the potential hazards associated with the possible confusion with the leased aircraft and will propose possible solutions to the issues.

2. DISCUSSION

- 2.1. The "Associazione Nazionale Assistenti e Controllori della Navigazione Aerea" (ANACNA) has identified a consistent challenge with leased aircraft, especially during the summer months in their operations. The challenges being faced pose a potential safety hazard. This risk should therefore be assessed and then remedied with appropriate procedures promulgated especially considering that issuing traffic information is fundamental to an ATCO's responsibility for preventing collisions.
- 2.2. ICAO Procedures for Air Navigation Services Air Traffic Management (PANS/ATM) Doc 4444 ATM/501 defines traffic information as "Information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision"⁴ The content required in the phraseology for passing traffic is provided in ICAO Doc 4444 ATM/501 Chapter 12.
- 2.3. Globally, several agencies have promulgated guidance for the operation of leased aircraft within their respective jurisdictions. These include various Civil Aviation Authorities (CAAs). The International Air Transport Association (IATA) has also promulgated guidance for the operation of leased aircraft. Much of the guidance material promulgated for the operation of leased aircraft does not include specific instructions for ATCOs who control those flights but rather focuses on legal and maintenance requirements. This is a gap in the consideration of the potential safety-related issues and has been identified by some organisations. This paper explores several different scenarios which may impact ATCOs in executing their responsibilities and also looks at the guidance material provided by the Federal Aviation Administration (FAA), for example.
- 2.4. The inclusion of information based on familiarity with an airline's equipment and livery (colour and markings) in passing traffic information may create several different scenarios for ATCOs based on the quality of the information and the traffic scenarios. ATCOs are mandated to pass traffic information to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision⁵. The phraseology provided in the International Civil Aviation Organization (ICAO) Document (Doc) 4444 Procedures for Air Navigation Services Operations (PANS) Air Traffic Management (ATM) does not require ATCOs to include information regarding the aircraft's colours or livery⁶.

⁴ ICAO Doc4444 Ch.1 Definitions

⁵ ICAO Doc4444 PANS ATM501, 16th Edition (2022) Ch1,

⁶ ICAO Doc444 PANS ATM501, 16th Edition, (2022) Ch12 12.3.1.7, 12.4.1.8

- 2.5. The table below presents different scenarios associated with confusion with leased aircraft.

Example Scenarios	Outcomes
<p>Aircraft "A" issued with line-up instructions behind landing aircraft B bearing company colours "BLUE". Aircraft "A" is the third aircraft in the landing sequence but the second aircraft in the landing sequence also bears the company colours "BLUE"</p>	<ul style="list-style-type: none"> ● Possible runway incursion due to pilot of "A" lining up after the wrong aircraft has landed ● Possible go around due to the departing aircraft lining up behind the wrong aircraft having landed, ● Increased workload for controller and pilot to correct the situation
<p>Aircraft "C," "D", and "E" on approach and are sequenced for landing. ATCO issues traffic information "E" you are following "Flight D" B737. "Flight D" is a leased aircraft unknown to the ATCO bearing a similar aircraft type and livery to Flight C. <i>The ATCO does not have the aircraft in sight and is utilising the flight progress strips for traffic information.</i></p>	<ul style="list-style-type: none"> ● Possible reduction in the required separation between the flights ● Increased workload for the ATCO to correct the situation ● ATCO will have to correct the previous transmission and re-issue traffic information and instructions once it is realised that the aircraft concerned is leased and has a different livery than previously transmitted.

A "wet leased" aircraft may increase (or improve) an ATCO's situational awareness if the crew operating the aircraft has a different accent than is usually associated with the airline operating with its own aircraft, flight number and crew.

Impact of confusion with leased aircraft on ATCOs

- 2.6. Leased aircraft that are not identified as such by pilots may cause ATCOs to control their traffic with an expectation bias when providing information to pilots in their area of jurisdiction. Accurate information is essential in ensuring that instructions which are promulgated can be safely adhered to. Inaccurate information does quite the opposite. Confusion may occur at airports (and in non-mode S equipped surveillance airspace) if ATCOs usually pass traffic along with information based on familiarity with the airlines and their equipment. The expectation bias that results from associating callsigns for airlines that are operating unknown leased aircraft with the airline's anticipated colour and markings can also cause errors which the ATCO has to correct. This would increase the ATCO's workload and reduce the efficiency of controlling in this specific scenario. Without adequate guidance and instructions for ATCOs, this situation could possibly result in air traffic service (ATS) incidents, especially in busy traffic environments where the ATCO is managing several aircraft simultaneously. With the global trend for leased aircraft in operations anticipated to be half of all the aircraft

worldwide⁷ there will possibly be a greater need for a standardised approach to managing leased aircraft operating in either the airport jurisdiction or in surveillance environments.

State Guidance for Leased Aircraft Operations

- 2.7. The Federal Aviation Administration (FAA) and Airservices Australia have both published similar information regarding the phraseology⁸ which should be used by the pilots operating interchanged or leased aircraft on initial contact. The phraseology is intended to advise the terminal Air Traffic Control (ATC) facilities on *first* contact that the aircraft being flown has a different operating company than the company name displayed. The example provided by the FAA:

“AIR CAL THREE ELEVEN, UNITED (INTERCHANGE/LEASE), BOEING SEVEN TWO SEVEN”

- 2.8. Airservices Australia publishes procedures for the management of leased or interchanged aircraft in the Aeronautical Information Publication (AIP) Australia. The AIP states that “Pilots flying an ‘interchange’ or ‘leased’ aircraft, not bearing the normal colours/markings of the company operating the aircraft, should inform the terminal (aerodrome) ATC facility, on first contact, of the name of the operating company and aircraft callsign, followed by the company name as displayed on the aircraft, and aircraft type.”⁹

The example given in the AIP is shown below:

VELOCITY THREE ELEVEN, AIR NEW ZEALAND INTERCHANGE (or LEASE), BOEING SEVEN FOUR SEVEN.

3. CONCLUSION

- 3.1. If ATCOs include information about aircraft colours and markings in passing traffic information, the operation of interchanged/leased aircraft may cause confusion in aircraft identification. This in turn could possibly compromise safety if an ATCO is not advised by the pilot that his aircraft is leased. The existing conventions to prevent such confusion should be strengthened across the industry if ATCOs continue to use the aircraft colours and markings to pass traffic information. Pilots operating leased aircraft should also be made aware of the importance of advising ATC that their aircraft bears different markings and livery than the operating company.

4. DRAFT RECOMMENDATIONS

- 4.1. It is recommended that this paper be accepted as information.

⁷ IATA Guidance Material and Best Practices for Aircraft Leases, 4th Edition: Share of Worldwide Fleet Under Operating Lease

⁸ FAA Aeronautical Information Manual. Section 2. Radio Communications Phraseology, 4-2-1 b)

⁹ Airservices Australia AIP. Ch4. Radio Telephony Procedures.

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