

Overview of Pani Base Camp Traffic Movement at Gorontalo Airspace

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Abstract—Flight plan is specific information related to a flight that will be destination. Flight plan contains information that covers the entire route of the intended flight. So the flight plan is mandatory on every flight. However, this is not in line with what happened to Perum LPPNPI KCP Gorontalo when it found traffic movements from Pani Base Camp owned by PT Gorontalo Sejahtera Mining. In addition, both parties also do not have a coordination agreement (LOCA) related to the movement of traffic from Pani Base Camp. In this research, the author uses a qualitative descriptive method to describe the problems that occur at Perum LPPNPI KCP Gorontalo based on data collected in the form of phenomena or events that occur. The purpose of this research is to achieve efficiency, effectiveness, and flight safety at Perum LPPNPI KCP Gorontalo.

Keywords—flight plan, coordination, LOCA, traffic (key words)

I. INTRODUCTION

Djalaluddin Airport is an airport located in Gorontalo Province as well as the main gateway for air transportation in the province. Djalaluddin Airport is directly managed by UPBU Gorontalo under the Directorate General of Civil Aviation [1]. While flight navigation services at Djalaluddin airport are managed by Perum LPPNPI Gorontalo Sub-Branch. Perum LPPNPI Gorontalo Sub-Branch serves combine services TWR and APP to aircraft under its responsibility to ensure safety, regularity, smooth flight traffic and prevent collisions [2].

Flight plan is certain information relating to the flight or part of the flight that an aircraft is headed for [3]. Every aircraft that will conduct a flight is required to submit a flight plan to the relevant ATS (Air Traffic Services) unit before operating. ICAO states that flight plans must be submitted by (1) every flight to be provided with ATC services, (2) every IFR flight within designated airspace, (3) every flight within, to, or along a designated route if required by the competent ATS authority to facilitate the provision of flight information, alerts, (4) also if required by the authorized ATS authority to facilitate coordination with the military units concerned or with air traffic service units in adjacent States to avoid the possible need for interception for identification purposes, and (5) any flight crossing an international border[4]. However, there are cases where an aircraft flies without submitting a flight plan.

The following is an example of a case that occurred on

October 12, 2022 where the APP/TWR unit of Perum LPPNPI KCP Gorontalo found an unexpected helicopter movement coming from Pani Base Camp owned by PT Gorontalo Sejahtera Mining. The APP/TWR unit of Perum LPPNPI KCP Gorontalo did not receive a flight plan from PT Gorontalo Sejahtera Mining as the operator of the flight. In addition, Perum LPPNPI KCP Gorontalo and PT Gorontalo Sejahtera Mining do not have a coordination agreement letter regarding the procedure for traffic movement from Pani Base Camp so that the coordination flow is not established between the two parties.

The Ministry of Civil Aviation in the national regulation confirms that air traffic service units must have a letter of coordination agreement (LOCA) with flight operators operating in their area of responsibility to ensure that the exchange of information between the two parties regarding operating flights can be established quickly and in accordance with agreed procedures[5].

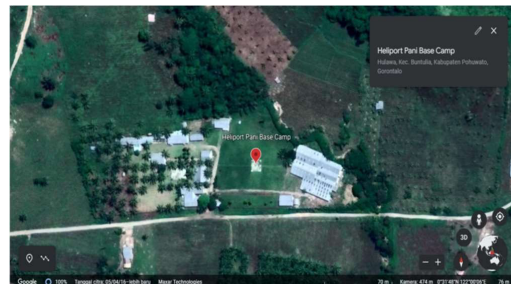


Fig 1. Pani Base Camp

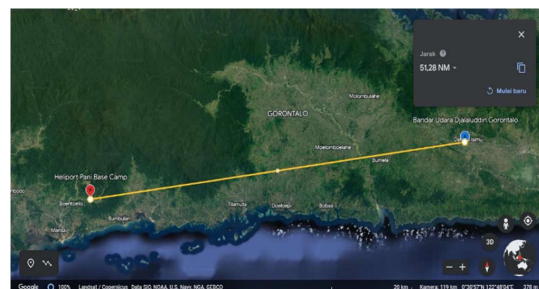


Fig 2. Pani Base Camp position of "GTL" VOR/DME



Pani Base Camp is located at coordinates 0° 31' 48.75" N 122° 00' 06.68" E, radial 262 51 NM from "GTL" VOR/DME, Pohuwatu Regency, Gorontalo Province. Pani Base Camp is the location where the Pani Gold project is run and managed by PT Gorontalo Sejahtera Mining in collaboration with PT Pani Bersama Jaya (PBJ), PT Pani Bersama Tambang, PT Puncak Emas Gorontalo, and PT Puncak Emas Tani Sejahtera [6].

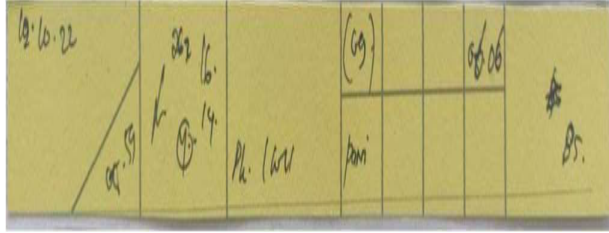


Fig 3. Pani Base Camp traffic FPS [7]

Based on the flight progress strip above, the flight took place on October 12, 2022 with registration and callsign PK-IWV, the aviator made first contact with the Gorontalo ATC officer at 05.59 UTC and reported that the helicopter was at an altitude of 3000 ft, positioned on radial 262 and was 16 NM away from the "GTL" VOR/DME. The existence of the helicopter appears suddenly so that it can cause potential hazards, namely Breakdown of Separation which can hamper the flow of flight traffic and can endanger the safety of other traffic [8]. The existence of the helicopter traffic caused problems because previously there was no flight plan related to the movement of the traffic received by the APP / TWR unit of Perum LPPNPI Gorontalo Sub-Branch from the party concerned. This problem is also supported by the absence of coordination procedures between the two parties that regulate and ensure the exchange of information related to the traffic movement. Fortunately, at the same time there was no other traffic arriving or departing other than the helicopter traffic so there was no traffic conflict.

II. METHOD

In this study, the authors used descriptive qualitative research methods. Qualitative descriptive method is one type of descriptive research method used to describe and describe phenomena or events that occur in the subject or object of research [9]. This method uses data in the form of descriptive information obtained from observations, interviews, and document reviews.

Descriptive research seeks to collect information to answer the researcher's questions through the process of presenting, analyzing, and interpreting research data [10].

In this study, descriptive research methods are used to investigate a condition, situation, or event that occurs in the subject or object of research, then the results will be presented in the form of a research report [11].

III. RESULT AND DISCUSSION

Based on the problems that occur, the author suggests two solutions as steps to solve the problem, including:

A. Counseling to PT Gorontalo Sejahtera Mining

The author suggests to hold socialization or counseling to PT Gorontalo Sejahtera Mining related to flight regulations. Reviewing the problems that occur, PT Gorontalo Sejahtera Mining needs to be equipped with regulations in aircraft operations, especially regarding flight plans as a must in aviation.

B. Letter of Coordination Agreement (LOCA) Preparation

The author also suggests a meeting between Perum LPPNPI KCP Gorontalo and PT Gorontalo Sejahtera Mining to discuss the creation of a coordination agreement (LOCA) related to traffic movement procedures from Pani Base Camp in order to ensure the exchange of information between the two parties related to aircraft position reporting and aircraft operations can be established quickly and precisely according to agreed procedures.

IV. CONCLUSION

Aviation regulations emphasize that every flight is required to send a flight plan to the ATS unit. However, this was not the case at Perum LPPNPI KCP Gorontalo when there was helicopter traffic from Pani Base Camp owned by PT Gorontalo Sejahtera Mining that did not send a flight plan, causing potential danger to traffic in the Gorontalo ATS unit's area of responsibility. In addition, both parties also do not have LOCA so there is no exchange of information related to the traffic movement.

To overcome these problems, Perum LPPNPI needs to conduct counseling to PT Gorontalo Sejahtera Mining regarding flight plans in aircraft operations. In addition, both parties need to hold a meeting to create a LOCA that contains coordination procedures related to traffic movements from Pani Base Camp in order to achieve efficiency, effectiveness, and flight safety at Perum LPPNPI KCP Gorontalo.

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