

(4) AIR-BORNE TRAFFIC

A point of considerable importance is the possible obstruction to air traffic caused by a bridge on the Stokes Point - Point Erin site. We quote in full the submission tendered by the Air Department:—

AIR DEPARTMENT
CIVIL AVIATION BRANCH

3/1/24 CA
923

31st May, 1946.

Memorandum for
The Secretary,
Auckland Trans-harbour Facilities Commission.
C/- Public Works Department,
Auckland.

AUCKLAND HARBOUR BRIDGE—OBSTRUCTION TO FLYING

WITH reference to your circular memorandum of the 3rd instant, officers of this Department have given consideration to the effect that the presence of a bridge across Auckland Harbour will have on aviation activities in the vicinity of Auckland, and I wish to present the following views:—

(i) That the existence of a bridge across the Waitemata Harbour on any site east of Kauri Point/Point Chevalier cannot be construed as an obstruction to any aircraft manoeuvring to land at, or after take off from, any existing land aerodrome in the vicinity of Auckland. It is desirable, however, that the selected site should not be further west than Birkenhead.

(ii) Although, particularly in the future, all commercial and Air Force aircraft will be fitted with radio and have the advantage of radio and other suchlike aids to navigation and aids to facilitate approach to and landing at main aerodromes, there will always be a large number of smaller club and private aircraft not equipped with such aids. The presence of a bridge in any locality on the harbour over what would be otherwise comparatively an unobstructed waterway would constitute a danger to the aerial navigation of such unequipped aircraft manoeuvring in the vicinity under conditions of poor visibility or extremely low ceiling—conditions not uncommon over the Waitemata. This aspect is not considered of sufficient weight to merit serious consideration in the arguments for or against the provision of a bridge across the Waitemata. Regulations can be imposed prohibiting the passage of aircraft into this area under such conditions and below a safe altitude.

(iii) To permit of the safe manoeuvring of the smaller amphibious and marine aircraft (based on Hobsonville or any point on the Upper Harbour) landing or taking off in the restricted water channels of the Upper Harbour, it is most desirable that a site for the bridge should not be selected further west than Birkenhead.

(iv) To facilitate the passage of large marine aircraft under tow or taxiing under their own power and on the surface of the water, between the landing areas down harbour and such repair bases as may be up-harbour or *vice versa*, it is deemed desirable that, for the major span of the bridge across deep water, the underside of the structure should not be less than 40 ft. above high-water spring tide and the unobstructed span between piers should not be less than 500 ft.

(v) The presence of a bridge across the harbour anywhere between Birkenhead and North Head will definitely constitute a serious obstruction to the landing and take off of large marine aircraft based on Mechanics Bay and utilizing the harbour waters west of Bean Rock for landing and take off in the commonly used directions. However, it is certain that other considerations will require the abandonment of Mechanics Bay Base within a few years and before the projected harbour bridge could eventuate. In the event of a major marine airport for Auckland still remaining a requirement for the future, it is considered that the marine airport base facilities and water-landing areas would be established eastward of the Waitemata based on sheltered water of Tamaki Straits. In that event, the projected harbour bridge could not be deemed an aerial obstruction to marine aircraft based and operating outside the bounds of the Waitemata Harbour waters. It is further considered that water-borne ship and boat traffic on the Waitemata will require the use of water areas *other than* those westward of Bean Rock as a permanent marine airport.

(vi) It is probable that the use of marine aircraft on air services operated by Tasman Empire Airways and R.N.Z.A.F. will terminate within three years and a change over effected to land-based aircraft. However, it is by no means certain that the future development of the marine aircraft, especially for long-range heavy air transport, will not necessitate the provision and maintenance of a major marine airport in the vicinity of Auckland. For the reasons set out in para. (v) above, such a permanent airport will not be practicable within the confined waters of the Waitemata.

Conclusion.—Although the presence of a bridge across the Waitemata Harbour is not desirable nor supported from the aviation viewpoint, there is insufficient justification to seriously oppose the proposal.