


AVIATION RESPONSE TO TWEED VALLEY HOSPITAL EIS FEEDBACK

1. The Environmental Impact Statement (EIS) for the Tweed Valley Hospital (TVH) invited feedback specifically relevant to the aviation discipline from the following:
 - a. AirServices Australia (AirServices),
 - b. the Civil Aviation Safety Authority (CASA) and
 - c. Gold Coast Airport (GCA) Pty Ltd.
2. The AirServices advice that TVH and its aviation operations will not adversely affect the smooth running of Gold Coast Airport is noted. The caveat related to "procedures not designed by AirServices at Gold Coast Airport were not considered in this report" pertains to Required Navigation Performance (RNP) Approach Charts developed mainly for Qantas by Naverus Inc, a wholly-owned subsidiary of General Electric Aviation. Although not "designed" by AirServices, the Naverus Inc RNP approaches are published by AirServices in Departure and Approach Procedures (DAP) for use by "CASA approved operators only". The minimum altitudes for the Naverus Inc approaches are consistent with other AirServices designed approaches into the Gold Coast airport i.e. overflight by commercial aircraft approaching Runway 32 will be in the vicinity of 2000 feet above helicopter operations at TVH and under positive Air Traffic Control. See Attachment 1. No action or amendment to previous advice is necessary as a result of the AirServices feedback.
3. CASA's advice to continue liaison with AirServices Australia and Gold Coast Airport Pty Ltd is noted and is taking place. This will continue as required throughout the development process. No action or amendment to previous advice is necessary as a result of CASA feedback.
4. Consultation has been ongoing with GCA. Some examples from GCA emails are reproduced below to demonstrate the level of contact and nature of discussions that took place early in the project:
 - a. 22/05/2018: "Please find attached drawings detailing heights for the Gold Coast OLS and PANS-OPS. At Cudgen you are looking at a height of around 150m above ground level."
 - b. 19/07/2018: "The airport makes specific contributions to the approval process though it is managed and arbitered by the Dept. of Infrastructure. I've cc'd [name removed] our Risk and Compliance Manager whose responsibilities include airspace and development applications. [name removed] will fill you in on the required actions from this point..." [email contact was made with the GCA Risk and Compliance Manager but no response was received.]
 - c. 19/07/2018: "The airport's role in the process is triggered by the DA."
 - d. 26/07/2018: "I've had a look at the proposed site and with protected surfaces at 150m I don't imagine the construction or building will be an issue. As the building is aligned with the RWY 32 approach, though obviously at point of higher altitude you should touch base with Airservices (if you've not already) regarding any helicopter operations to and from the hospital. We will receive notification of the development and provide comment where appropriate once the formal development process has been initiated."
5. Comments on issues raised in the GCA response are outlined below:
 - a. General: Gold Coast Airport (GCA) consultation has occurred from the early stages of planning and will continue as design progresses. Examples have been provided above to demonstrate the consultation.
 - b. Original consultation was based upon an estimate of elevation and to AviPro's knowledge there was a common understanding that the elevation of both the building and the cranes that will be used to erect it will be well below Obstacle Limitation Surfaces (OLS) for the Gold Coast Airport (which they are). Early advice from GCA at this time was that "At Cudgen you are looking at a height of around 150m above ground level" before running into

- OLS problems. After examination, it was determined that the cost of detailed technical examination was not deemed warranted at such an early stage of the process.
- c. General: The Development Application (DA) provided to AirServices Australia was the right and proper process to go the next step and have a full technical review of the implications of the development. This has now been done and there are no concerns. Advice received from GCA confirmed that "The airport's role in the process is triggered by the DA."
 - d. General: GCA provided access to Keyhole Mark-up language Zipped (KMZ) files which were the primary source of initial investigation into potential airspace conflicts. The diagrams from the GCA Master Plan that were used, provided the easiest manner in which to portray investigation outcomes.
 - e. General: It should be noted that if TVH sat 300-400 metres further south it would be outside of controlled airspace and outside of Gold Coast Airport's direct sphere of influence.
 - f. Response in relation to the specific comment that CASA was not consulted: CASA does not regulate helipads/Helicopter Landing Sites (HLS). CASA's demonstrated lack of direct, early involvement in past developments of this nature provides clear guidance that definitive early advice should not be expected from CASA for such matters. Comments received from CASA have not identified anything that has necessitated changes to advice provided.
 - g. Response in relation to the specific comment asking if/when AirServices was consulted: AirServices was the first agency consulted and their early advice was to deal with GCA in the first instance. AirServices was again consulted at the (Airport) DA stage. The AirServices response to the EIS raised no issues about the consultation process.
 - h. Response in relation to the specific comment regarding potential noise complaints: A rooftop HLS in a rural area will result in less noise and disruption to the general public than is caused by the current on-grade HLS at The Tweed Hospital. It should be expected that, in the mature state, the overall number of noise complaints per helicopter movement will reduce when compared to those currently received at The Tweed Hospital. The planned approach and departure paths avoid built-up areas to the greatest extent possible. TVH will not be a trauma facility and helicopter movements are expected to be infrequent. The Noise and Vibration Assessment prepared by Acoustic Studio which provides a high-level consideration of operational noise impacts, including helicopter noise (s9.4) confirms that this matter has been considered in the context of the proposal.
 - i. Response in relation to the specific comment querying the veracity of a UK Health Building note as a guidance document: UK Building Note 15-03: Hospital helipads covers HLS' across the full spectrum of hospital sites in the UK and is considered by AviPro to be a useful reference.
 - j. Response in relation to the specific comment regarding "grandfathering" compliance and standards: CASA does not regulate helipads/Helicopter Landing Sites (HLS). The key statement in this section is that "Standards set by NSW Ambulance were established to meet or exceed those requirements." TVH will be such a case of meeting or exceeding all ICAO and CASA recommended standards and practices.
 - k. Response in relation to the specific comment that other sources of wind information are available on the internet: Only the BOM produces historical records and data over 15 years of measurement. The BOM data was considered to be the most appropriate for this development.
6. During development of the EIS, feedback from the community highlighted some general concerns regarding the interaction of helicopters with wildlife in the broader TVH helicopter approach and departure "catchment" area. This area generally, encompasses the area out to the coast from the location of the TVH and then northwards towards the Queensland border. The following advice is provided in relation to these general concerns:

- a. The number of helicopter movements to and from the new TVH should not be significantly greater than the current number of movements to and from The Tweed Hospital. Therefore, the hazard/risk is not appreciably different.
 - b. Helicopter operators who currently operate to and from The Tweed Hospital are the same people who will operate to and from the new TVH. These operators, and their pilots specifically, know their local area and will take little adjustment to adapt to the new TVH.
 - c. Birds, bats and now even drones are part of the everyday hazards that pilots need to consider during their planning and during the conduct of flight operations. Sensitive areas in the general vicinity of the HLS once identified, such as wildlife reserves, known breeding grounds and roosting colonies etc, are identified on the aviation data base for the hospital such that helicopter operators gain greater awareness of their (the sensitive area) existence. As part of any commissioning documentation, any necessary "Fly Neighbourly" procedures can be developed in conjunction with helicopter operators. It is distinctly in the interests of helicopter operators to avoid areas where bird/bat strikes can cause aircraft damage or maintenance/inspection down-time.
 - d. There are a number of locations where bats roost and fly that are nearby hospital helicopter landing sites throughout the state and pilots remain vigilant in their duties to avoid them. This is a normal risk that is addressed thousands of times a year when helicopters conduct their life saving work for NSW Ambulance.
7. Please do not hesitate to contact my colleague Jeff Stark should you have questions in relation to this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Steve".

Steve Graham

Managing Director

AviPro

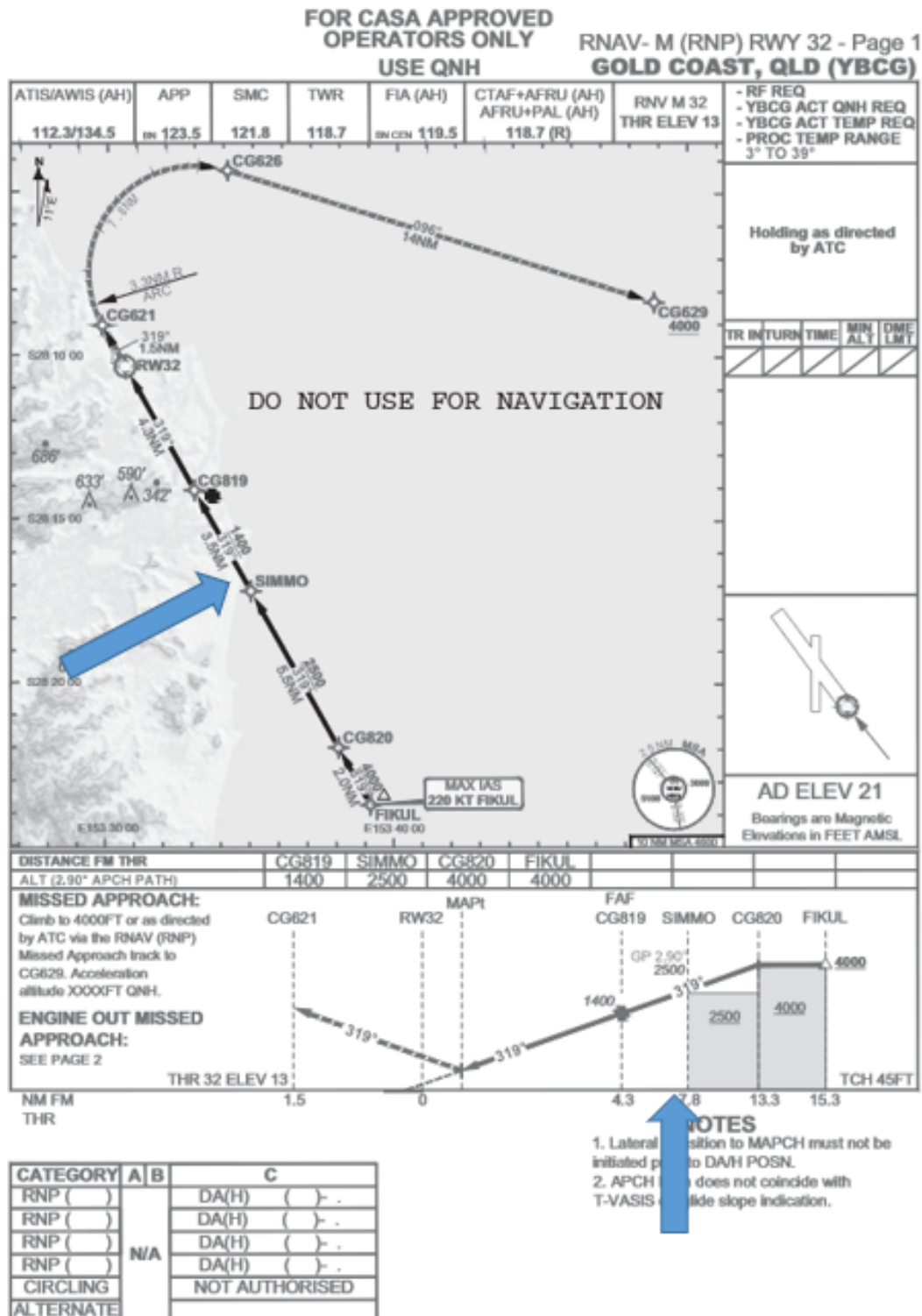
Aviation Management and Safety Advisors

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Attachment:

1. RNP Approach Chart – Gold Coast Runway 32 showing altitude markers abeam TVH

ATTACHMENT 1: GCA RUNWAY 32 RNP APPROACH CHART



Changes: Updated DA(H) and visibilities, Deleted CG625, Added CG626, Minimum temperature, ASA format.



21 AUG 2014

Prepared by Navenus, Inc.

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