

# location matters

**Land**Tasmania

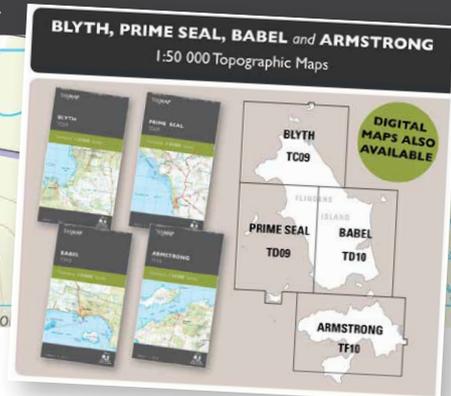
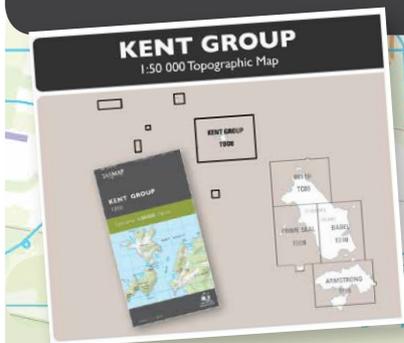
*A point of reference for Tasmanian Land Information*



*Drone imagery captured following the southern Tasmanian extreme weather event in May 2018.*

# New 1:50 000 map products for Bass Strait Islands

Find out more about these and other new products on page 8.



This newsletter is designed and produced by **Land Tasmania**, a Division of the Tasmanian Department of Primary Industries, Parks, Water and Environment (DPIPWE).

**location matters** aims to keep clients and members of the community informed about new developments and progress with existing projects, as well as introduce you to staff and the work they do.

Please take a few minutes to provide feedback or ideas for future issues by completing the short questionnaire at [www.dpipwe.tas.gov.au/locationmatters](http://www.dpipwe.tas.gov.au/locationmatters)

An electronic version of this publication can be found at:

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## Message from the GM



### Welcome to this latest edition

of location matters, **Land Tasmania's** bi-annual Newsletter. This issue is packed with interesting information and demonstrates the breadth of activities in which **Land Tasmania** is involved.

This year's Federal Budget contained a significant allocation for investment in National Positioning Infrastructure (NPI), and the recently launched 'Digital Earth Australia' initiative. The NPI investments are comprised of two components: the first is the Space Based Augmentation System, or SBAS, worth \$160.9 million over four years, which involves the launch of a geostationary satellite that broadcasts correction signals for GPS and other Global Navigation Satellite Systems, or GNSS. The significance of the SBAS is that it will deliver decimeter positioning solutions Australia wide, without the need for mobile phone coverage. This is a game changer for many industries, particularly agriculture, mining, aviation, rail, shipping and road transport, and has ancillary benefits for all users of positioning technology.

The second element of the package, worth \$64 million over four years, is to deliver

comprehensive position, navigation and timing data at the three to five centimeter level in areas of mobile phone coverage. This will be achieved by densifying the network of Continuously Operating Reference Stations, or CORS, and establishing a Data Analysis Center that models and broadcasts correction signals.

The Digital Earth Australia initiative aims to invest \$36.9 million over three years from 2019-20 to provide Governments, businesses, researchers and individuals with access to reliable standardised satellite data. This data can be used to build new digital products and services for commercial purposes, and to enable analysis and interpretation of Australia's physical landscape.

Significantly, the Budget measures include funded recurrent expenditure to ensure that the initiatives that are established can be maintained and improved in perpetuity.

Together, these initiatives provide significant opportunities for Tasmanians, and **Land Tasmania** is working with the Minister for Primary Industries and Water to optimise those opportunities as they roll out.

Stuart Fletcher  
General Manager,  
**Land Tasmania**

## CONTENTS

Message from the GM	2
Location information provides critical support during weather emergency	3
Spatial expertise helps customise Emergency Services dispatch system	4
Digitisation transforms access to 1.5 million land records	6
Dedicated business analyst appointed for Land Titles Office	6
VISTAS new property and valuation register	7
GDA2020 update	7
News in brief	8
New TASMAT products	8

### Cover image

Drone imagery captured following the southern Tasmanian extreme weather event in May 2018. Read the full story on page 3.



This publication has been printed on Maine Recycled Silk paper, made from 60% post consumer waste fibre and 40% FSC® certified virgin fibre. Maine recycled is also CarbonNeutral®.

All photography has been taken by Tasmanian Government employees unless otherwise acknowledged.



# Location information provides *critical support during weather emergency*

**Location information,** including a suite of apps previously developed by the Emergency Services GIS team (ES-GIS), played a critical role in the response to the unprecedented weather event that struck south-east Tasmania earlier this year.

On the evening of 10 May the south-east of the state experienced a storm that caused extensive damage to homes, businesses and infrastructure. Hobart and surrounding suburbs were some of the hardest hit areas. Hobart CBD recorded almost 130mm of rain over a 24 hour period, with a third of that falling between 10pm and 11pm, resulting in cars being washed down city streets and many river systems becoming overloaded.

An Emergency Operations Centre (EOC) was established at 3am the following morning and ES-GIS was operational by 5am with the primary objective to establish situational awareness for the EOC through the Common Operating Platform (COP) managed by **Land Tasmania**.

Rapid Impact Assessment (RIA) teams from Tasmania Fire Service and State Emergency Services were assembled to

collect intelligence on the impact to the community. ES-GIS undertook a desktop assessment to prioritise data capture areas. The assessment considered a number of information inputs, including SES Request-For-Assistance data, emergency services observations, social media reports and topography.

Field teams were assigned areas and ES-GIS provided a refresher to the RIA mobile field data collection apps. A suite of apps have been previously developed by ES-GIS in preparation for events such as the one experienced. These apps enforce data integrity through consistency of field data capture. They work in environments without reception, such as the unexpected Telstra outage across Sandy Bay caused by the event, and if web connectivity is available, impact assessments captured in the field, including photos, became immediately available to the EOC via the COP.

Saturday saw the weather improve sufficiently enough to enable the capture of aerial imagery and video footage of the Hobart Rivulet area using a remotely piloted aircraft (RPA), or drone. The RPA rapidly captured observations over a broad area, including land normally difficult

or dangerous to access. Output from the RPA flight included georeferenced imagery that could be used immediately within GIS applications.

Ground-based RIA continued through to Sunday evening. From Monday morning the response transitioned to community recovery, where RIA data informed the type and scope of recovery activities required, including the need for community outreach.

Since this incident, ES-GIS have built a map-based Operations Dashboard to better convey RIA specific data and statistics, and have developed a public crowd sourced app where the public can contribute information relating to impact and damage. Both developments will provide significant benefits to EOCs during major emergencies.

*Road damage in Hobart as a result of heavy flooding.*



*Drone imagery used to identify damage over the Hobart Rivulet after the southern Tasmanian extreme weather event in May 2018.*



# Spatial expertise helps customise Emergency Services dispatch system

**Location-based datasets** are being utilised and developed by **Land Tasmania** to help customise the State's new Emergency Services Computer-Aided Dispatch (ESCAD) system.

The ESCAD Project is a \$17 million call-taking and dispatch system for Tasmania Police, Ambulance Tasmania, Tasmania Fire Service and the State Emergency Service. Inspector Fiona Lieutier, the ESCAD Project Manager, said it is the first time in Tasmania that the four emergency services will share an integrated call taking and dispatch system with mapping incorporated. Previously each service used different mapping components for their incident management and call taking/dispatching.

Tasmania Police went live with ESCAD in October 2017 and the Tasmania Fire Service/State Emergency Service went live on 18 September 2018. Ambulance Tasmania is due to go live in 2019. "That's when we'll have true multi-agency functionality," said Fiona.

"If Police, for example, get a phone call about a car accident in which someone is having a heart attack, previously they would need to manually obtain the details, hang up from that person, and then phone the Ambulance Service with the details so that they could in turn contact the person



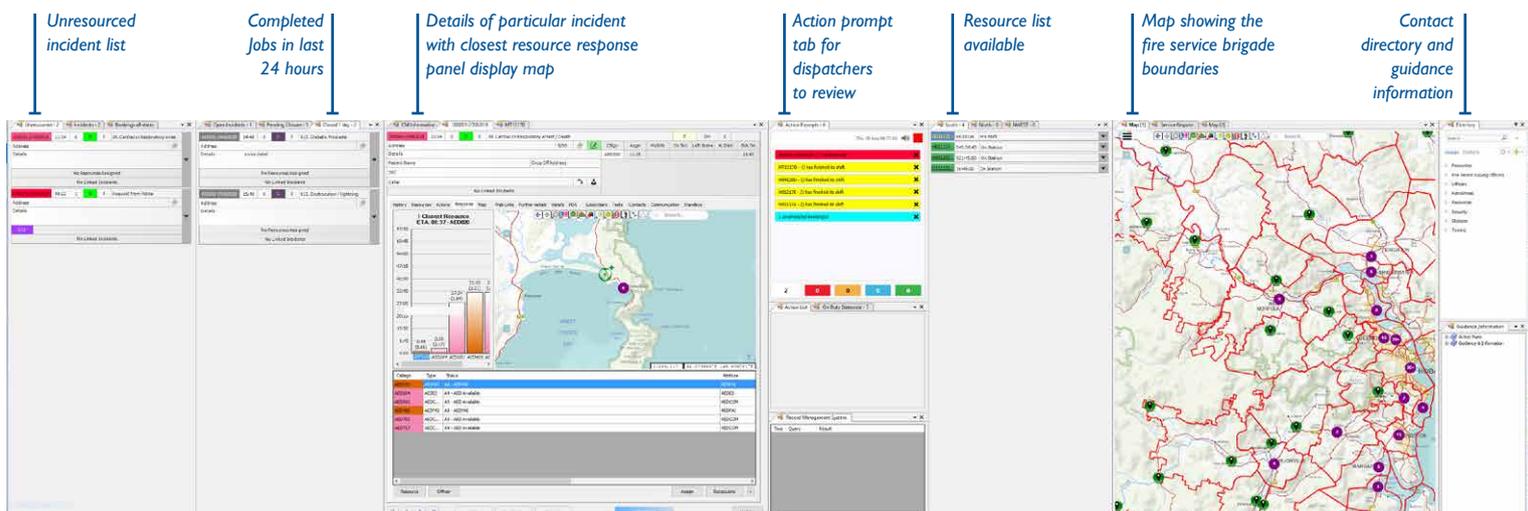
Multi agency project team testing and configuring the new ESCAD system.

who made the initial call. But with the new system, all of those details can automatically go through the system so that the relevant services can access them straight away.

"It's estimated that around 20 phone calls will be saved in every multi-agency incident. These phone calls can equate to the difference between life and death for members of the public, as well as for emergency services workers."

Peter von Minden, the Spatial Information Facilitation Officer with **Land Tasmania**,

was brought into the project in late 2016. Not only did Peter have experience with the spatial software that underpins ESCAD but also knowledge of the data that was being used, including local government areas, land tenure and cadastral parcels, and so on. A significant portion of this information, which is being used in the system, is sourced from the LIST (Land Information System of Tasmania) managed by **Land Tasmania** within the Department of Primary Industries, Parks, Water and Environment (DPIPWE).



Ambulance Tasmania emergency medical dispatcher screen with smaller map showing closest resource response and larger map showing resources and Tasmanian Fire Service brigade boundaries.

Ambulance Tasmania  
is scheduled to  
go live in 2019



Unresourced  
incident list

Completed  
Jobs in last  
24 hours

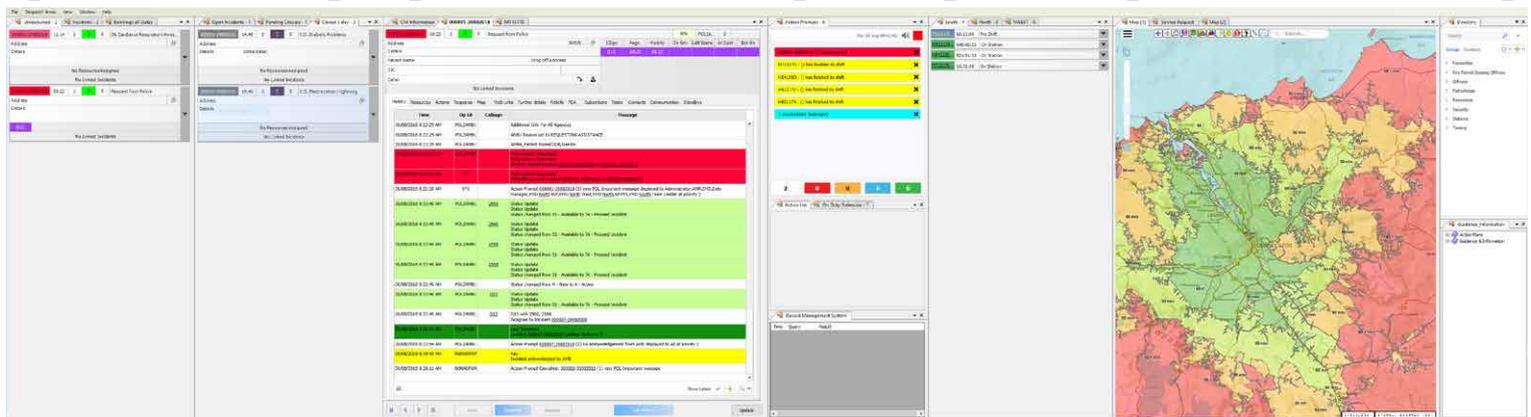
Details of  
particular  
incident

Action prompt  
tab for  
dispatchers  
to review

Resource  
list available

Map showing  
distance to  
closest major  
receiving hospital

Contact  
directory and  
guidance  
information



Ambulance Tasmania emergency medical dispatcher screen with map showing distance to closest major receiving hospital.

"From a mapping perspective there's a lot of crossover between the various agencies," Peter said.

"It's a multi-agency approach so they're all using the same underlying data but each agency also has its own unique mapping requirements. In some cases I actually developed spatial datasets that only previously existed as hand-drawn regions on a map or a list in a database or spreadsheet.

The impetus to adopt the world-class ESCAD technology came from the 2013 Tasmanian Bushfires – specifically the challenges faced by Police, the Fire Service and the SES in communicating with each other. The Tasmanian Government's inquiry into these bushfires later highlighted the need for a better system of communication and it's the commitment by each of the services to embrace this finding that is driving the ESCAD Project's success.

**“There haven’t been any egos on the project; everybody just wants the best for the community. We genuinely want to make sure we’re doing something that makes a difference.”**

*Inspector Fiona Lieutier, Tasmania Police.*

“**Land Tasmania** is able to offer this expertise because we have such a strong history and background in the spatial sector and we are arguably one of the leaders in this field, within the Department and across the State Service. We have already been producing similar data and services for the COP (Common Operating Platform), LISTmap and other spatial platforms that have been supporting the emergency services for a number of years.”

“One of the things that many people have noticed with this project is not just the operating system but the collaborative spirit among so many different groups, such as DPIPWE, Ambulance, Fire, Police and the SES,” Fiona said.

“There haven’t been any egos on the project; everybody just wants the best for the community. We genuinely want to make sure we’re doing something that makes a difference.”

The ESCAD system was purchased from a UK-based company and is being integrated locally by Fujitsu Australia in partnership with Tasmanian company Synateq. It includes a five-year support contract with Fujitsu, which means the system will remain contemporary and well maintained. But Peter agreed with Fiona in that while the technology rates as world class, it is the spirit of collaboration among the diverse team of experts that is truly ground-breaking.

“I recently attended a conference with some of my spatial counterparts from other jurisdictions and one thing I kept hearing from them is how they are in awe of how Tasmania is taking a multi-agency approach with our dispatch system,” he said.

“I think Tasmania's collaboration is largely due to the size of our state and the limited number of resources we have when compared to other states and territories. However when we compare it with similar sized jurisdictions, they still seem to find collaboration elusive.

“So it's very encouraging to be the envy of our colleagues abroad and be leading the pack in that respect.”

# Digitisation

transforms access to 1.5 million land records

## Land Tasmania

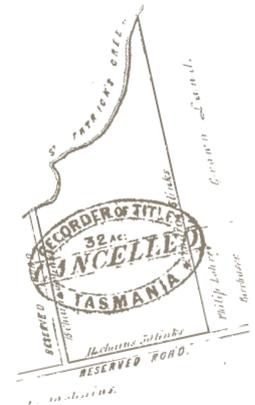
has continued to invest in digitisation efforts to improve access to important land records. Work began in 2017 to make the large repository of records in the Deeds Office accessible online. The Deeds Office has been situated in the basement of the Lands Building in Hobart and houses records forming the Registry of Deeds as well as a considerable number of historical records relating to the Land Titles Act. These records are accessed on a daily basis by solicitors, conveyancers, staff and the general public, to ensure that the vendor has a valid and legal title to convey the purchaser. The records are also of significant historical value, with some dating back to the 1800s.

The digitisation of the Deeds Office records is in line with **Land Tasmania's** strategy to support contemporary conveyancing practices in a digital world, while ensuring the permanent preservation of the physical hardcopy records through their relocation to the Tasmanian Archives and Heritage Office.

Digitisation works commenced in December 2017, with the Nominal Indexes made available online via the Land Information System Tasmania (LIST) in March 2018. Deeds Memorials were released in July 2018. The other major record sets previously in the Deeds Office, the historical Certificates of Titles and Purchase Grants, were added to the LIST in September 2018. A number of related

index series have also been digitised and made available.

A full listing of records available on the LIST can be found at: [www.thelist.tas.gov.au/app/export/sites/default/the-list/help-files/Historic-Deeds/The\\_LIST\\_records.pdf](http://www.thelist.tas.gov.au/app/export/sites/default/the-list/help-files/Historic-Deeds/The_LIST_records.pdf).



# Dedicated business analyst

appointed for Land Titles Office



## The Land Titles Office (LTO)

has established a dedicated business analyst role to focus on facilitating a smooth transition of its operations into a digital environment. This includes reviewing business practices and procedures to identify areas for improvement, and assisting with the implementation of national electronic conveyancing.

In April, Stuart James was appointed into this position. Stuart comes to the LTO from the Australian Taxation Office (ATO) where he specialised in business analysis and project management. His work at the ATO focused on the implementation of electronic communications systems and the development of correspondence templates that met the needs of stakeholders. Stuart is also an admitted legal practitioner who

studied at the University of Tasmania and has working experience at a Hobart law firm.

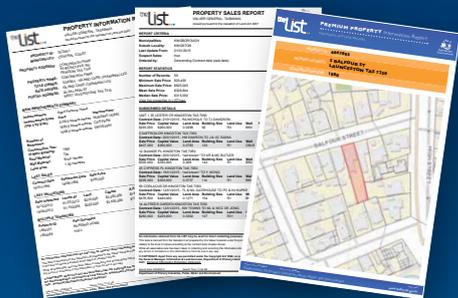
Already Stuart has commenced reviews into a range of topics including:

- implementing national electronic conveyancing
- the review of online materials and external stakeholder engagement
- practices in relation to complex applications
- co-operation with the Office of the Surveyor General, and
- work management systems and processes.

Stuart will work closely with clients of the Land Titles Office to ensure that services meet their specific needs. This process will take time but clients will be hearing more as Stuart settles into the role.

## Land Information System Tasmania

### the List Premium Property Report



Property information, sales and statistics in a single report



Tasmanian Government

[www.thelist.tas.gov.au](http://www.thelist.tas.gov.au)

#### Client Services contact details

Normal operating hours for all client enquiries are:

9.00am – 5.00pm Monday to Friday

#### LIST Helpdesk

E-mail [listhelp@dpipwe.tas.gov.au](mailto:listhelp@dpipwe.tas.gov.au)

Phone (03) 6165 4444

Web via the client request form

#### TASMAP

E-mail [tasmap@dpipwe.tas.gov.au](mailto:tasmap@dpipwe.tas.gov.au)

Phone (03) 6165 4444

Order online at [www.tasmap.tas.gov.au](http://www.tasmap.tas.gov.au)

#### Spatial Data / Agreements / Copyright

Email [listhelp@dpipwe.tas.gov.au](mailto:listhelp@dpipwe.tas.gov.au)

Phone (03) 6165 4444

# VISTAS

new property and valuation register

## The Office of the Valuer-General

(OVG) has been working with a local Tasmanian IT company to develop a new property and valuation information system named VISTAS, which is scheduled to go live before November 2018. The primary business objective of the new VISTAS is to provide an authoritative property and valuation register that underpins the framework for all Tasmanian land.

The VISTAS implementation project team has completed a rigorous Remediation Testing phase and is now in the middle of User Acceptance Testing (UAT) – where all the critical functionality and data quality is being verified. Upon its completion, the training phase will begin with in-depth or high level training depending on end user and stakeholder requirements.

The transition to the new VISTAS system will not affect existing interactions and processes between the OVG, local councils, and the State Revenue Office (SRO). The OVG will be better placed to more effectively service the councils with their queries and statutory valuations, with opportunities in the future to automate or streamline processes across all municipalities in Tasmania. Similarly, there will be opportunities to improve the exchange of information between the OVG and SRO.

Thanks to the dedication from the project team, the OVG will soon be able to realise some significant benefits in business efficiencies, improved support for valuations, capturing property information, management of addresses, and new reporting and analytic capabilities.

Sample Property Information Hub in VISTAS.

The screenshot displays the VISTAS Property Information Hub interface. The top navigation bar includes links for Property Hub, Valuation, Address Management, Contacts, Tasks, Sale Hub, Admin, and System User. The main content area is divided into a left sidebar with navigation icons and a main panel. The main panel shows detailed information for a specific property:

- Property Title:** LANDS BUILDING 134 MACQUARIE STREET HOBART TAS 7000
- PID:** 56689150
- Title:** 2398921
- Municipality:** HOBART
- Property Status:** Live
- Property Type:** Valuation Roll Entry
- Owner:** THE TRUST COMPANY LIMITED
- Postal Address:** LEVEL 25 255 GEORGE ST SYDNEY NSW 2000
- Last Issued:** 05/12/2017
- Issued Valuation:**
  - LV: \$
  - CV: \$
  - AAV: \$
  - AVM Ratio: %
- Reason:** RNU - BLD-16-747 Commercial Alterations - RNU Revocation Not Justified
- Levels at:** 01/07/2014
- Improvement:** OFFICE BUILDING
- Building Area (m<sup>2</sup>):** 11950.0
- Wall:** Concrete
- Roof:** Concrete
- VPCC:** C20 - Office
- Land Area (Ha):** 0.1968

Below the main panel is a map showing the property location in Hobart, Tasmania. At the bottom, there is a table with columns for General, Address, Titles, File References, Tasks, Notes, and Actions. The table contains the following data:

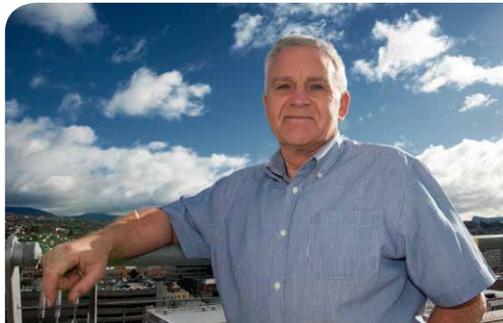
General	Address	Titles	File References	Tasks	Notes	Actions
PID 5668915				Property Status Live		
Council Valuation Number 12672.0				Working Valuation Number 12672.0		Field Book Number 225
Property Type Valuation Roll Entry				Municipality HOBART		Ward CENTRAL Submarket CENTRAL COMMERCIAL

## GDA2020 update

The Intergovernmental Committee on Surveying and Mapping (ICSM) continues to manage the implementation of Australia's new modernised datum, GDA2020. All jurisdictions, including Tasmania, are refining and adjusting their implementation plans to accommodate the systems and data upgrades and updates that are required. The pace of implementation is governed by a number of factors beyond the control of individual states and territories, such as the developments in software platforms that are needed to accommodate new

transformation parameters, and make these updates seamless for users. ICSM is engaging in an international effort to address these matters, which are required throughout the planet, but for which Australia has at present the most pressing need. Our involvement provides an opportunity for Australia to make a truly significant international impact in this space, and by so doing establish a de-facto template for the integration of datum transformation parameters in the open source and proprietary software environments alike.

# News in brief...



## Enduring legacy of a high-flying career

After almost 53 years contributing to the mapping and photographic record of Tasmania, Robert Essex was recently farewelled into retirement.

Bob has been one of the longest-serving officers at DPIPW. He was first employed as a photographic lab technician in the Department's darkroom, undertaking processing tasks utilised in map production. He then progressed to aerial photography work, often spending long hours in a small aircraft. When not in the air, Bob undertook darkroom work including processing the film negatives.

With his appointment in 1991 to Production Manager, Bob's flying days were over; however he was still heavily involved with aerial photography, overseeing post flying film and print processing.

With growing demands for aerial photography prints and over a quarter of a million frames of photography, Bob lobbied heavily within the division for an archiving process that would preserve the films for perpetuity and provide public access.

The Leica DSW700 scanner was purchased with Bob placed in charge of its operation. In January 2018 the final films were scanned and transferred to TAHO. Bob's final tasks involved populating the database for web based searching of the aerial photos.

*Farewell Bob.*

## FEATURE PRODUCT

### 1:50 000 maps for Flinders Island

TASMAP has recently released five new printed and digital 1:50 000 maps covering the Furneaux Group and Kent Group of islands. The waters in the area include some of the most remarkable cruising grounds in the world with a range of beautiful, safe anchorages. On land spectacular scenery, extensive coastal bushwalking, and leisure and fishing opportunities make these maps an essential navigational aid for visitors. Two discounted map bundles are available: the Furneaux Group Bundle, which gives complete coverage of the Group; and the Flinders Island Bundle, covering mainland Flinders Island. This is also the first time the Kent Group of islands has been portrayed on a TASMAP series product.

### Local council data now available via the LIST

Local Government Consolidated Data Collection information has been released by the Local Government Division of the Department of Premier and Cabinet via LISTmap and the LIST Open Data portal. <https://maps.thelist.tas.gov.au/listmap/app/list/map?bookmarkId=304263>

Data on revenue, capital expenditure, land use, planning applications, human resources and operational expenditure, among others, is available for all Tasmanian councils. With data ranging from the year 2000 to the present, approximately 500 excel spreadsheets of raw data and derived spatial datasets are now easily accessible by the Tasmanian community through LISTmap. With planned yearly updates, this forms a fantastic resource regarding council's continual operations.

For further information please contact the LIST helpdesk.

## NEW TASMAP PRODUCTS

Recently released map products are now available for purchase online at [www.tasmap.tas.gov.au](http://www.tasmap.tas.gov.au) or from Service Tasmania shops and TASMAP resellers.

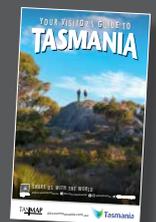
### 1:50 000 Topographic Maps

- Adamsons
- Armstrong
- Babel
- Blyth
- Kent Group
- Macquarie Harbour
- Perth
- Prime Seal
- Sideling
- St Clair
- Table Cape



### Tourist Products

- Visitors Guide to Tasmania



### National Park, Walk and Recreation Maps

- Cradle Mountain Day Walk (reprint)
- Cradle Mountain Lake St. Clair National Park
- Freycinet National Park
- South Coast Walks



### Digital downloads

- National Park, Walk and Recreation Maps
- 1:50 000 Topographic Maps – complete coverage - Now available as a statewide coverage on USB drive.

### Historical map reproductions

- 42 new high quality reproductions from the TASMAP Historical Map collection

Now available online at  
[www.tasmap.tas.gov.au](http://www.tasmap.tas.gov.au)

## Direct enquiries to

Manager - Service Delivery

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E: [listhelp@dpiwwe.tas.gov.au](mailto:listhelp@dpiwwe.tas.gov.au)

W: [www.dpiwwe.tas.gov.au/locationmatters](http://www.dpiwwe.tas.gov.au/locationmatters)

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