

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 311

PROBLEM SET 10

Due: Friday, November 10, 2017

1. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

2. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

3. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

4. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

5. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

6. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

7. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

8. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

9. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

10. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

11. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

12. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

13. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

14. A particle of mass m moves in a circular path of radius r with constant speed v .

(a) Find the magnitude of the centripetal acceleration.

(b) Find the magnitude of the centripetal force.

Memorandum of Resolutions of the Director(s) of

Alan Thompson Aircraft Sales Pty Ltd ACN: 066288775

ATF Thompson Superannuation Fund

Fund and that they are not disqualified persons as defined by s 120 of the SISA.

CONTRIBUTIONS RECEIVED:

It was resolved that the contributions during the year be allocated to members on the basis of the schedule provided by the principal Fund employer.

ACCEPTANCE OF ROLLOVERS:

The trustee has ensured that any rollover made to the Fund, meets the requirements of the Fund's deed and does not breach the superannuation laws in relation to:

1. making rollover between Funds; and,
2. breaching the Fund or the member investment strategy.

The trustee has reviewed the rollover and received advice that the rollover is in accordance with the Trust Deed and the rules of the Fund and the superannuation laws. As such the trustee has resolved to accept the rollover on behalf of the member.

PAYMENT OF BENEFITS:

The trustee has ensured that any payment of benefits made from the Fund, meets the requirements of the Fund's deed and does not breach the superannuation laws in relation to:

1. making payments to members; and,
2. breaching the Fund or the member investment strategy.

The trustee has reviewed the payment of the benefit and received advice that the transfer is in accordance with the Deed and the superannuation laws. As such the trustee has resolved to allow the payment of the benefits on behalf of the member.

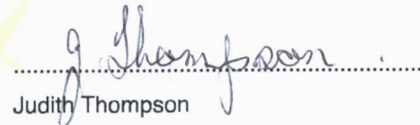
CLOSURE:

Signed as a true record –



Alan Thompson

12 September 2022



Judith Thompson

12 September 2022

Memorandum of Resolutions of the Director(s) of

Alan Thompson Aircraft Sales Pty Ltd ACN: 066288775

ATF Thompson Superannuation Fund

FINANCIAL STATEMENTS OF SUPERANNUATION FUND:

It was resolved that the financial statements would be prepared as special purpose financial statements as, in the opinion of the directors of the Trustee Company, the Superannuation Fund is not a reporting entity and therefore is not required to comply with all Australian Accounting Standards.

It was further resolved that the financial statements and notes to the financial statements of the Superannuation Fund in respect of the year ended 30 June 2022 thereon be adopted.

TRUSTEE'S DECLARATION:

It was resolved that the trustee's declaration of the Superannuation Fund be signed.

ANNUAL RETURN:

Being satisfied that the Fund had complied with the requirements of the Superannuation Industry (Supervision) Act 1993 (SISA) and Regulations during the year ended 30 June 2022, it was resolved that the annual return be approved, signed and lodged with the Australian Taxation Office.

TRUST DEED:

It was resolved that the advice received from the Fund's legal adviser confirming that the fund's trust deed is consistent with all relevant superannuation and trust law.

INVESTMENT STRATEGY:

The allocation of the Fund's assets and the Fund's investment performance over the financial year were reviewed and found to be within the acceptable ranges outlined in the investment strategy. After considering the risk, rate of return, diversification and liquidity of the investments and the ability of the Fund to discharge its existing liabilities, it was resolved that the investment strategy continues to reflect the purposes and circumstances of the Fund and its members. Accordingly, no changes in the investment strategy were required.

INSURANCE COVER:

The trustee(s) reviewed the current life and total and permanent disability insurance coverage on offer to the members and resolved that the current insurance arrangements were appropriate for the Fund.

ALLOCATION OF INCOME:

It was resolved that the income of the Fund would be allocated to the members based on their average daily balance (an alternative allocation basis may be percentage of opening balance).

INVESTMENT ACQUISITIONS:

It was resolved to ratify the investment acquisitions throughout the financial year ended 30 June 2022.

INVESTMENT DISPOSALS:

It was resolved to ratify the investment disposals throughout the financial year ended 30 June 2022.

AUDITORS:

It was resolved that

Tony Boys

of

Box 3376, Rundle Mall, South Australia 5000

act as auditors of the Fund for the next financial year.

TAX AGENTS:

It was resolved that

Angus Morrison

act as tax agents of the Fund for the next financial year.

TRUSTEE STATUS:

Each of the trustee(s) confirmed that they are qualified to act as trustee(s) of the

Thompson Superannuation Fund Trustees Declaration

Alan Thompson Aircraft Sales Pty Ltd ACN: 066288775

The directors of the trustee company have determined that the Fund is not a reporting entity and that these special purpose financial statements should be prepared in accordance with the accounting policies described in Note 1 to the financial statements.

The directors of the trustee company declare that:

- (i) the financial statements and notes to the financial statements for the year ended 30 June 2022 present fairly, in all material respects, the financial position of the Superannuation Fund at 30 June 2022 and the results of its operations for the year ended on that date in accordance with the accounting policies described in Note 1 to the financial statements;
- (ii) the financial statements and notes to the financial statements have been prepared in accordance with the requirements of the trust deed; and
- (iii) the operation of the superannuation fund has been carried out in accordance with its trust deed and in compliance with the requirements of the Superannuation Industry (Supervision) Act 1993 and associated Regulations during the year ended 30 June 2022.

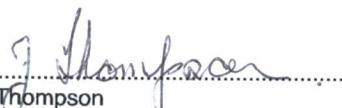
Specifically, the directors of the trustee company declare that:

- in accordance with s120 of the Superannuation Industry (Supervision) Act 1993, no individual trustee has been or is a disqualified person;
- the Fund has satisfactory title to all assets, all assets are unencumbered and free from charge as prescribed by s50 of the Superannuation Industry (Supervision) Act 1993 and reg13.14 of the Superannuation Industry (Supervision) Regulations 1994; and
- to the knowledge of the directors of the trustee company, there have been no events or transactions subsequent to the balance date which could have a material impact on the Fund. Where such events have occurred, the effect of such events has been accounted and noted in the Fund's financial statements.

Signed in accordance with a resolution of the directors of the trustee company by:



Alan Thompson
Alan Thompson Aircraft Sales Pty Ltd
Director



Judith Thompson
Alan Thompson Aircraft Sales Pty Ltd
Director

12 September 2022

Electronic Lodgment Declaration (SMSF)

This declaration is to be completed where the tax return is to be lodged via an approved ATO electronic channel.

It is the responsibility of the taxpayer to retain this declaration for a period of five years after the declaration is made, penalties may apply for failure to do so.

Privacy

The ATO is authorised by the Taxation Administration Act 1953 to request the provision of tax file numbers (TFNs). The ATO will use the TFNs to identify each partner or beneficiary or entity in our records. It is not an offence not to provide the TFNs. However, you cannot lodge your tax return electronically if you do not quote your TFN.

Taxation law authorises the ATO to collect information and disclose it to other government agencies, including personal information about the person authorised to sign the declaration. For information about privacy go to ato.gov.au/privacy

The Australian Business Register

The Commissioner of Taxation, as Registrar of the Australian Business Register, may use the ABN and business details which you provide on this tax return to maintain the integrity of the register.

Please refer to the privacy statement on the Australian Business Register (ABR) website (www.abr.gov.au) for further information - it outlines our commitment to safeguarding your details.

Electronic funds transfer - direct debit

Where you have requested an EFT direct debit some of your details will be provided to your financial institution and the Tax Office's sponsor bank to facilitate the payment of your taxation liability from your nominated account.

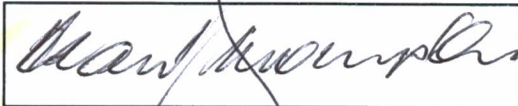
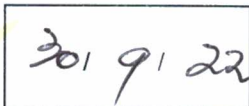
Tax File Number	Name of Fund	Year
Provided	Thompson Superannuation Fund	2022

I authorise my tax agent to electronically transmit this tax return via an approved ATO electronic channel.

Important

Before making this declaration please check to ensure that all income has been disclosed and the tax return is true and correct in every detail. If you are in doubt about any aspect of the tax return, place all the facts before the Tax Office. The tax law provides heavy penalties for false or misleading statements on tax returns.

- Declaration:** I declare that:
- All the information provided to the agent for the preparation of this tax return, including any applicable schedules is true and correct; and
 - I authorise the agent to lodge this tax return.

Signature of Partner, Trustee, or Director  Date 

ELECTRONIC FUNDS TRANSFER CONSENT

This declaration is to be completed when an electronic funds transfer (EFT) of a refund is requested and the tax return is being lodged through an approved ATO electronic channel.

This declaration must be signed by the partner, trustee, director or public officer prior to the EFT details being transmitted to the Tax Office. If you elect for an EFT, all details below must be completed.

Important: Care should be taken when completing EFT details as the payment of any refund will be made to the account specified.

Account Name	<input type="text"/>	
Account Number	<input type="text"/>	Client Reference <input type="text" value="THOMPSON0721"/>

I authorise the refund to be deposited directly to the specified account

Signature Date

Signature as prescribed in tax return

[Signature box]

Tax File Number 782072493

Section K: Declarations

Penalties may be imposed for false or misleading information in addition to penalties relating to any tax shortfalls.

Important

Before making this declaration check to ensure that all income has been disclosed and the annual return, all attached schedules and any additional documents are true and correct in every detail.

Privacy

The ATO is authorised by the Taxation Administration Act 1953 to request the provision of tax file numbers (TFNs). We will use the TFN to identify the entity in our records.

Taxation law authorises the ATO to collect information and disclose it to other government agencies. For information about your privacy go to ato.gov.au/privacy

TRUSTEE'S OR DIRECTOR'S DECLARATION:

I declare that, the current trustees and directors have authorised this annual return and it is documented as such in the SMSF's records. I have received a copy of the audit report and are aware of any matters raised therein.

Authorised trustee's, director's or public officer's signature

[Signature of Alan Thompson]

Date 30 / 9 / 2022

Preferred trustee or director contact details:

Title: Mr Mrs Miss Ms Other

Family name

Thompson

First given name Other given names

Alan

Phone number

Email address

Non-individual trustee name (if applicable)

Alan Thompson Aircraft Sales Pty Ltd

ABN of non-individual trustee

Time taken to prepare and complete this annual return Hrs

The Commissioner of Taxation, as Registrar of the Australian Business Register, may use the ABN and business details which you provide on this annual return to maintain the integrity of the register.

TAX AGENT'S DECLARATION:

I declare that the Self-managed superannuation fund annual return 2022 has been prepared in accordance with information provided by the trustees, that the trustees have given me a declaration stating that the information provided to me is true and correct, and that the trustees have authorised me to lodge this annual return.

Tax agent's signature

[Signature of Angus Morrison]

Date

Tax agent's contact details

Title: Mr Mrs Miss Ms Other

Family name

Morrison

First given name Other given names

Angus

Tax agent's practice

Morrison, Angus

Tax agent's phone number 0395846422

Reference number THOMPSON0721

Tax agent number 24756885