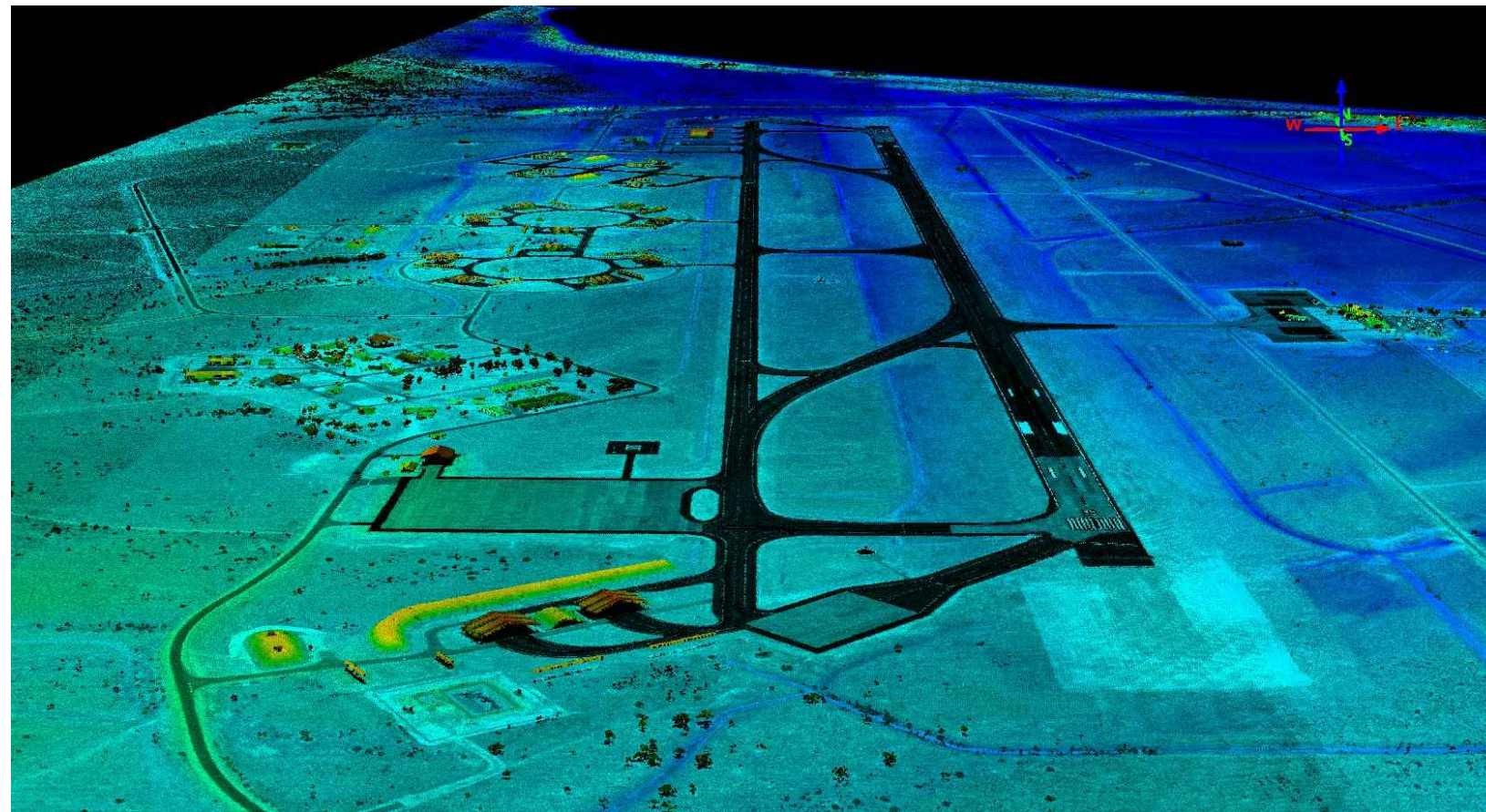


# OBSTACLE LIMITATION SURVEYS AND ASSESSMENT

RAAF BASE LEARMONTH AERODROME OBSTACLE CHART ICAO TYPE A  
(OPERATING LIMITATIONS ) ISSUED JANUARY 2018



REV	DATE	REVISION DETAILS	APPROVED
A	07.10.16	FINAL FOR REVIEW	
B	08.06.17	SIGNED FOR ISSUE	GG
C	12.01.18	SIGNED FOR ISSUE	GG

SCALE	SIZE
AS SHOWN	A1/A3
DRAWN	AM
SURVEYED	AB / AAM
CHECKED	DGG

SIGNED FOR ISSUE	DATE
NOT FOR CONSTRUCTION	12.01.18
	
GARRY GRAHAM	

PROJECT	OBSTACLE LIMITATION SURVEYS AND ASSESSMENT
TITLE	RAAF BASE LEARMONTH AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED JANUARY 2018 COVER SHEET
DRAWING No.	PROJECT No. 248842 - WBS D21009 - TYPE DRG - DISC CV - NUMBER 001 - REV C

DECLARED DISTANCES FOR RUNWAY 18	
TAKE OFF RUN AVAILABLE (TORA)	3047m (9996')
TAKE OFF DISTANCE AVAILABLE (TODA)	3352m (10997') 2.05%
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	3047m (9996')
LANDING DISTANCE AVAILABLE (LDA)	3047m (9996')
SUPPLEMENTARY TAKE OFF DISTANCE AVAILABLE (STODA)	3258m (10688') 1.6%, 3325m (10908') 1.9%, 3343m (10967') 2.0%

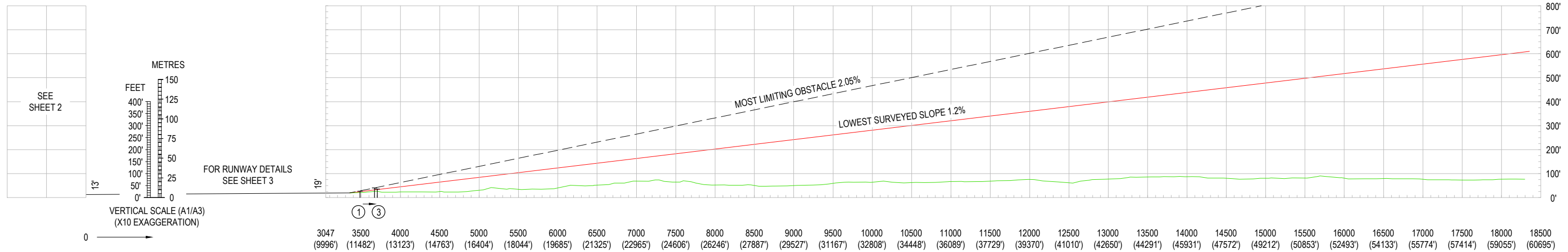
LEGEND	
	LOWEST SURVEYED SLOPE
	GROUND LEVEL
	MOST LIMITING OBSTACLE
	OBSTACLE

**NOTES**

- AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA94) ZONE 50 THE VERTICAL DATUM BEING AHD.
- HORIZONTAL DIMENSIONS IN METRES (FEET) ELEVATIONS IN FEET
- USERS OF THIS CHART SHOULD NOTIFY ANY ERRORS OR OMISSIONS AS SOON AS THEY BECOME APPARENT TO :-  
  
PROJECT DIRECTOR  
NATIONAL AIRFIELD PROJECT  
BP26-1C-052  
DEPARTMENT OF DEFENCE  
CANBERRA ACT 2600  
TEL: (02) 6266 8081
- FOR FURTHER INFORMATION REGARDING THIS CHART CONTACT THE ABOVE
- MAGNETIC VARIATION 0°22' E (JANUARY 2018)
- AERIAL SURVEY COMPLETED MARCH 2016.  
GROUND SURVEY CHECKS AND VERIFICATION JUNE 2016.

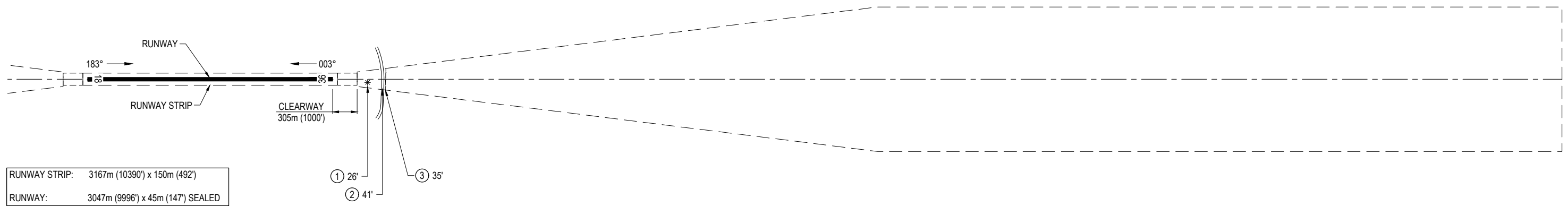
**LEGEND**

OBSTRUCTIONS AND OBSTACLES	
	OBSTACLE NUMBER
392'	TOP ELEVATION IN FEET
	TREE(S) OR VEGETATION
	BUILDING OR LARGE STRUCTURE
	POLE, TOWER, SPIRE ETC
	ANTENNA
	MOVING (ROADS, RAILWAY TRACKS ETC)
	TERRAIN PENETRATING LOWEST SURVEYED SLOPE
	OVERHEAD TRANSMISSION LINE
	FENCE LINE



**RUNWAY 18**

1:25000 (A1)  
1:50000 (A3)  
SCALE 1:25000

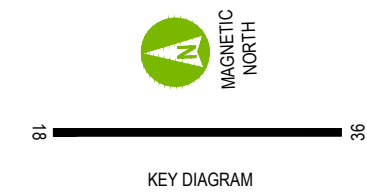


RUNWAY STRIP: 3167m (10390') x 150m (492')  
RUNWAY: 3047m (9996') x 45m (147') SEALED

THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

DANIEL GEEVES  
REGISTERED SURVEYOR  
aurecon

12/01/2018  
DATE



REV	DATE	REVISION DETAILS	APPROVED
A	07.10.16	FINAL FOR REVIEW	
B	08.06.17	SIGNED FOR ISSUE	GG
C	12.01.18	SIGNED FOR ISSUE	GG

SCALE	SIZE
AS SHOWN	A1/A3
<b>DRAWN</b>	
AM	
<b>SURVEYED</b>	
AB / AAM	
<b>CHECKED</b>	
DGG	

**SIGNED FOR ISSUE**  
NOT FOR CONSTRUCTION  
  
  
GARRY GRAHAM  
DATE 12.01.18

PROJECT	TITLE	DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV
OBSTACLE LIMITATION SURVEYS AND ASSESSMENT	RAAF BASE LEARMONTH AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED JANUARY 2018 RUNWAY 18 - SHEET 1 OF 3	248842	D21009	DRG	CV	002	C	

DECLARED DISTANCES FOR RUNWAY 36	
TAKE OFF RUN AVAILABLE (TORA)	3047m (9996')
TAKE OFF DISTANCE AVAILABLE (TODA)	3352m (10997') 1.64%
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	3047m (9996')
LANDING DISTANCE AVAILABLE (LDA)	3047m (9996')
SUPPLEMENTARY TAKE OFF DISTANCE AVAILABLE (STODA)	3344m (10971') 1.6%

**LEGEND**

	LOWEST SURVEYED SLOPE
	GROUND LEVEL
	MOST LIMITING OBSTACLE
	OBSTACLE

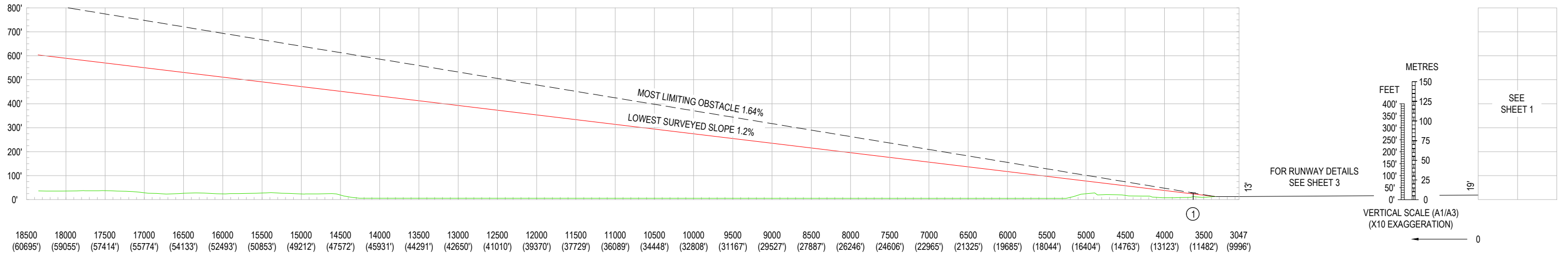
**NOTES**

- AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA94) ZONE 50 THE VERTICAL DATUM BEING AHD.
- HORIZONTAL DIMENSIONS IN METRES (FEET) ELEVATIONS IN FEET
- USERS OF THIS CHART SHOULD NOTIFY ANY ERRORS OR OMISSIONS AS SOON AS THEY BECOME APPARENT TO :-  
  
PROJECT DIRECTOR  
NATIONAL AIRFIELD PROJECT  
BP26-1C-052  
DEPARTMENT OF DEFENCE  
CANBERRA ACT 2600  
TEL: (02) 6266 8081
- FOR FURTHER INFORMATION REGARDING THIS CHART CONTACT THE ABOVE
- MAGNETIC VARIATION 0°22' E (JANUARY 2018)
- AERIAL SURVEY COMPLETED MARCH 2016.  
GROUND SURVEY CHECKS AND VERIFICATION JUNE 2016.

**LEGEND**

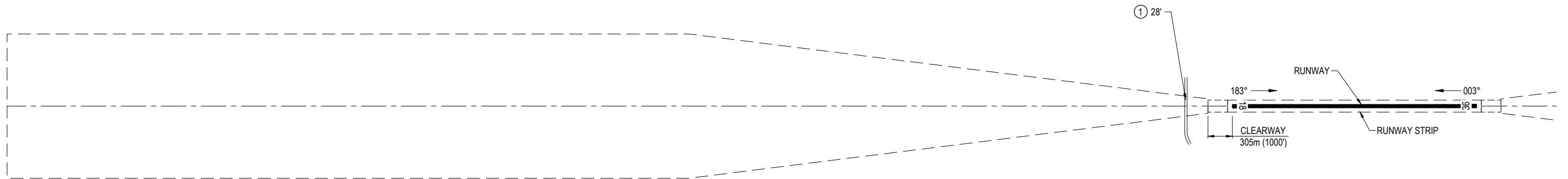
**OBSTRUCTIONS AND OBSTACLES**

	OBSTACLE NUMBER
	392' TOP ELEVATION IN FEET
	TREE(S) OR VEGETATION
	BUILDING OR LARGE STRUCTURE
	POLE, TOWER, SPIRE ETC
	ANTENNA
	MOVING (ROADS, RAILWAY TRACKS ETC)
	TERRAIN PENETRATING LOWEST SURVEYED SLOPE
	OVERHEAD TRANSMISSION LINE
	FENCE LINE



**RUNWAY 36**

1:25000 (A1)  
1:50000 (A3)  
SCALE 1:25000



RUNWAY STRIP:	3167m (10390') x 150m (492')
RUNWAY:	3047m (9996') x 45m (147') SEALED



81 36

KEY DIAGRAM

THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

*Daniel Geeves*  
DANIEL GEEVES  
REGISTERED SURVEYOR  
aurecon

12/01/2018  
DATE

REV	DATE	REVISION DETAILS	APPROVED
A	07.10.16	FINAL FOR REVIEW	
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C	12.01.18	SIGNED FOR ISSUE	GG

SCALE	AS SHOWN	SIZE	A1/A3
DRAWN	AM	APPROVED	
SURVEYED	AB / AAM	DATE	12.01.18
CHECKED	DGG		

SIGNED FOR ISSUE	NOT FOR CONSTRUCTION
<i>Garry Graham</i>	
GARRY GRAHAM	

PROJECT	OBSTACLE LIMITATION SURVEYS AND ASSESSMENT					
TITLE	RAAF BASE LEARMONTH AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED JANUARY 2018 RUNWAY 36 - SHEET 2 OF 3					
DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV
248842	D21009	DRG	CV	003	C	

DEPARTMENT OF DEFENCE

ESTATE AND INFRASTRUCTURE GROUP

AERODROME OBSTACLE CHART - ICAO TYPE A  
(OPERATING LIMITATIONS) JANUARY 2018, COMPILED BY AURECON

TO BE READ IN CONJUNCTION WITH CURRENT NOTAMs

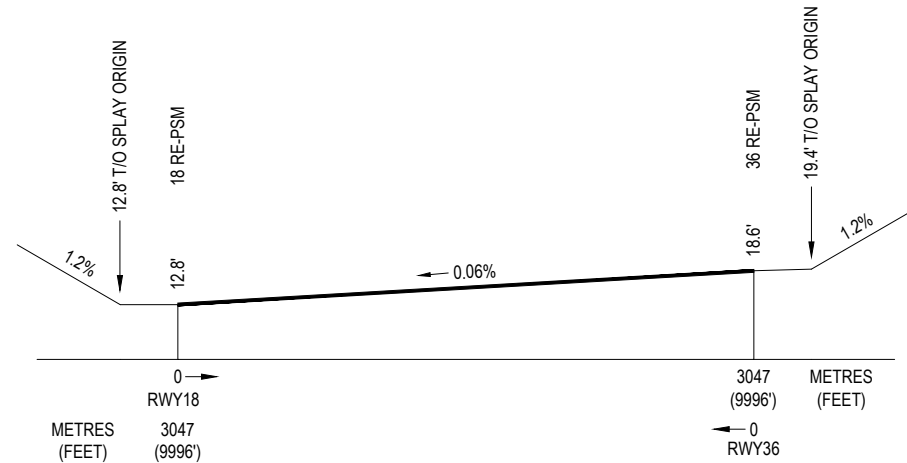
THE ORIGIN OF THE TAKE OFF SURFACE IS LOCATED AT THE END OF THE CLEARWAY  
DISTANCES COMMENCE FROM THE RAAF RE-PSM AT THE START OF THE TAKE-OFF RUNWAY (SOT)

DATUM

AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA94) ZONE 50  
THE VERTICAL DATUM BEING AHD.

DEFINITIONS

- RE-PSM: RUNWAY END PERMANENT SURVEY MARK
- LENGTH OF INNER EDGE 180m
- RATE OF DIVERGENCE OF SPLAY (EACH SIDE) 12.5%
- FINAL WIDTH 1800m
- OVERALL LENGTH 15000m



18/36 RWY LONGITUDINAL SECTION  
NOT TO SCALE

18 TAKE OFF																			
RE - PSM AT START OF TORA											RUNWAY MAGNETIC BEARING		TORA		TODA		ELEVATION AT T.O. ORIGIN		
REF No	GEOGRAPHIC						MGA		ELEVATION		(DEG) (MIN) (SEC)	(m)	(FT)	(m)	(FT)	(m)	(FT)		
	LAT		LONG		EASTING	NORTHING	(m)	(FT)											
	(DEG)	(MIN)	(SEC)	(DEG)					(MIN)	(SEC)									
	-22°	13'	11.94"	114°	05'	28.11"	200117.82	7539943.18	3.9	12.8	183°	29'	31"	3047	9996	3352	10997	5.9	19.4
OBJECTS THAT APPEAR ON THE CHART																			
REF No	GEOGRAPHIC						MGA		ELEVATION TOP		TYPE OF OBSTACLE	DISTANCE FROM SOT		OFFSET		GRADIENT TO TOP			
	LAT		LONG		EASTING	NORTHING	(m)	(FT)	(m)	(FT)		(m)	(FT)						
	(DEG)	(MIN)	(SEC)	(DEG)										(MIN)	(SEC)				
1	-22°	15'	04.81"	114°	05'	18.53"	199910.31	7536464.24	8.0	26.2	TREE	3482.4	11425.2	39.9R	130.8R	1.59			
2	-22°	15'	10.62"	114°	05'	15.11"	199815.56	7536283.56	12.4	40.6	MOVING	3667.3	12031.9	125.8R	412.6R	2.05			
3	-22°	15'	11.76"	114°	05'	14.74"	199805.76	7536248.19	10.8	35.3	FENCE	3703.1	12149.2	133.8R	439.1R	1.38			

36 TAKE OFF																			
RE - PSM AT START OF TORA											RUNWAY MAGNETIC BEARING		TORA		TODA		ELEVATION AT T.O. ORIGIN		
REF No	GEOGRAPHIC						MGA		ELEVATION		(DEG) (MIN) (SEC)	(m)	(FT)	(m)	(FT)	(m)	(FT)		
	LAT		LONG		EASTING	NORTHING	(m)	(FT)											
	(DEG)	(MIN)	(SEC)	(DEG)					(MIN)	(SEC)									
	-22°	14'	50.78"	114°	05'	20.95"	199971.13	7536897.48	5.7	18.6	3°	29'	31"	3047	9996	3352	10997	3.9	12.8
OBJECTS THAT APPEAR ON THE CHART																			
REF No	GEOGRAPHIC						MGA		ELEVATION TOP		TYPE OF OBSTACLE	DISTANCE FROM SOT		OFFSET		GRADIENT TO TOP			
	LAT		LONG		EASTING	NORTHING	(m)	(FT)	(m)	(FT)		(m)	(FT)						
	(DEG)	(MIN)	(SEC)	(DEG)										(MIN)	(SEC)				
1	-22°	12'	53.21"	114°	05'	32.25"	200225.42	7540521.89	8.5	27.8	MOVING	3629.9	11909.0	79.6R	261.1R	1.64			

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DANIEL GEEVES  
REGISTERED SURVEYOR  
aurecon

12/01/2018  
DATE



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C	12.01.18	SIGNED FOR ISSUE	GG

SCALE	SIZE
AS SHOWN	A1/A3
DRAWN	AM
SURVEYED	AB / AAM
CHECKED	DGG

SIGNED FOR ISSUE	APPROVED
NOT FOR CONSTRUCTION	
	GARRY GRAHAM

PROJECT	TITLE	DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV
OBSTACLE LIMITATION SURVEYS AND ASSESSMENT	RAAF BASE LEARMONTH AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED JANUARY 2018 RUNWAY 18 & 36 - SHEET 3 OF 3	248842	D21009	DRG	CV	004	C	