No. 245 **23** March ***2007***

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with Regulation 24(c) of the Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Aerospace Operations

registered by Organising Field 10, Physical, Mathematical, Computer and Life Sciences, publishes the following unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the unit standard upon which the qualification is based. The full unit standard can be accessed via the SAQA web-site at **www.saqa.org.za**. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach SAQA at the address below and no later than ***23 April 2007.*** All correspondence should be marked Standards Setting – Aerospace Operations addressed to

The Director: Standards Setting and Development

Attention: Mr. D. Mphuthing
Postnet Suite 248
Private Bag X06
Waterkloof
0145
or faxed to 012 – 431-5144
e-mail: dmphuthing@saqa.org.za

DR. S. BHKHA
DIRECTOR: STANDARDS SETTING AND DEVELOPMENT

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate an understanding of helicopter aerodynamics

SAQA US ID	*UNIT STANDARD TITLE*		
243737	Demonstrate an understanding of helicopter aerodynamics		
SGB		*PROVIDER*	
SGB Aerospace Operations			
FIELD		*SUBFIELD*	
10 - Physical, Mathematical, Computer and Life Sciences		Physical Sciences	
ABET BAND	*UNITSTANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level *5*	12
REGISTRATION STATUS	*REGISTRATION START DATE*	*REGISTRATION END DATE*	*SAQA DECISION NUMBER*
Draft - Prep for P Comment			

SPECIFIC OUTCOME 1
Explain the principles of rotor aerodynamics

SPECIFIC OUTCOME 2
Explain the principles of hovering and horizontal movement.

SPECIFIC OUTCOME 3
Explain the factors involved in forward flight

SPECIFIC OUTCOME 4
Explain autorotative flight

SPECIFIC OUTCOME 5
Explain hazardous conditions and recovery from them.

SPECIFIC OUTCOME 6
Explain the power requirements in different flight conditions

SPECIFIC OUTCOME 7
Explain the stability properties of a helicopter.

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UNIT STANDARD:

Perform advanced manoeuvres and procedures in a helicopter

SAQA US ID	***UNIT STANDARD TITLE***		
243750	Perform advanced manoeuvres and procedures in a helicopter		
SGB		***PROVIDER***	
SGB Aerospace Operations			
FIELD		***SUBFIELD***	
10 - Physical, Mathematical, Computer and Life Sciences		Physical Sciences	
ABET BAND	***UNIT STANDARD TYPE***	***NQF LEVEL***	***CREDITS***
Undefined	Regular	Level 5	5
REGISTRATION STATUS	***REGISTRATION START DATE***	***REGISTRATION END DATE***	***SAQA DECISION NUMBER***
Draft - Prep for P Comment			

SPECIFIC OUTCOME 1
Turn helicopter steeply during real and or simulated flight operations.

SPECIFIC OUTCOME *2*
Perform co-ordination manoeuvres during real and or simulated flight operations.

SPECIFIC OUTCOME 3
Perform advanced ground reference manoeuvres during real and or simulated flight operations

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UNIJ SJANDARD:

Perform preflight planning for helicopters

SAQA US *ID*	*UNIT STANDARL*		
243752	Perform pre-flight plan-'--fo		
SGB		***PROVIDER***	
SGB Aerospace Operations			
FIELD		***SUBFIELD***	
10 - Physical, Mathematical, Computer and Life		Physical Sciences	
ABET BAND	***UNITSTANDARD N P E***	***NQF LEVEL***	***CREDITS***
Undefined	Regular	Level 5	10
REGISTRA JION STATUS	***REGISTRA JION START DATE***	***REGISTRATION END DATE***	***SAQA DECISION NUMBER***
Draft - Prep for P Comment			

SPECIFIC OUTCOME 1
Plan fuel requirements for a flight

SPECIFIC OUTCOME 2
Determine helicopter performance

SPECIFIC OUTCOME 3
Compile **a** contingency plan

SPECIFIC OUTCOME **4**
Compile a flight plan

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UNIT STANDARD:

Pilot a multi-engine helicopter in IFR and VFR conditions

SAQA US ID	*UNIT STANDARD TITLE*		
243755	Pilot a multi-engine helicopter in IFR and VFR conditions		
SGB		*PROVIDER*	
SGB Aerospace Operations			
FIELD		*SUBFIELD*	
10 - Physical. Mathematical, Computer and Life Sciences		Phvsical Sciences	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 6	5
REGISTRATION STATUS	*REGISTRATION START DATE*	*REGISTRATION END DATE*	*SAQA DECISION NUMBER*
Draft - Prep for P Comment			

SPECIFIC OUTCOME 1
Identify the effects of failure of an engine on the control and performance of a multi-engine helicopter.

SPECIFIC OUTCOME 2
Taxi a multi-engine helicopter.

SPECIFIC OUTCOME 3
Plan for flight in a multi-engine helicopter.

SPECIFIC OUTCOME 4
Perform take-off in multi-engine helicopter.

SPECIFIC OUTCOME 5
Fly a multi-engine helicopter.

SPECIFIC OUTCOME 6
Manage engine failure during flight

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UNIT STANDARD:

Perform helicopter take-offs, air taxi, hovering, landings and go-arounds

SAQA US ID	*UNIT STANDARD TITLE*		
243756	Perform helicopter take-offs, air taxi, hovering, landings and go-arounds		
SGB		*PROVIDER*	
SGB Aerospace Operations			
FIELD		*SUBFIELD*	
10 - Physical. Mathematical. Computer and Life Sciences		Phvsical Sciences	
ABET BAND	*UNIT STANDARD TYPE*	*NQF LEVEL*	*CREDITS*
Undefined	Regular	Level 5	8
REGISTRATION STATUS	*REGISTRATION START DATE*	*REGISTRATION END DATE*	*SAQA DECISION NUMBER*
Draft - Prep for P Comment			

SPECIFIC OUTCOME 1
Perform take-offs during real and or simulated flight operations.

SPECIFIC OUTCOME *2*
Perform hovering during real and or simulated flight operations.

SPECIFIC OUTCOME 3
Perform air taxi during real and or simulated flight operations.

SPECIFIC OUTCOME 4
Perform landings during real and or simulated flight operations

SPECIFIC OUTCOME *5*
Perform go-arounds during real and or simulated flight operations.