COMPETITION REGULATIONS



PART SEVEN: ARTISTIC SWIMMING RULES



APPENDIX 6: HYBRID CATALOGUE (V 5.1)

EXCERPT TAKEN DIRECTLY FROM WORLD AQUATICS COMPETITION REGULATIONS

In force as of 1 January 2025





29.6 APPENDIX 6 - HYBRID CATALOGUE (VERSION 5.1)

Introduction

- 1) World Aquatics documents written word will prevail over any other documents or video examples (AQUA or otherwise).
- 2) As stated in the AS Manual regarding judging routines, the same principle shall also apply for TCs: Hybrids may be performed close to or far from TCs position and/or in moving water caused by the (intentional) power of actions, the number of athletes performing, or the moving progression ("travelling") of the Hybrid, as such TCs must focus on what they see at or over the water surface.
- 3) In regard to any hybrid techniques where compliance to specific angles or height levels is required:
 - If technology is available at a competition where athletes can be accurately measured via analysis software for compliance to stated angles or height levels, then clear non-compliance to a required angle or level would result in a Base Mark
 - For Technical Controllers without technology then non-compliance to a required angle or height level should be very obvious and clear in a video review (so far off the angle/height that there is no doubt). If too close to call and in doubt, then the ruling should go in favour of the athlete.

Hybrids

Definition of a Hybrid:

- A free hybrid (one intentionally being declared for DD on a Coach Card) is defined as having a combination of five (5) or more movements performed with lower limbs with intentional apnea (head down under hips level).
- Short hybrid-like movements of 4 or less movements with or without intentional apnoea OR horizonal movements along the surface with lower limb actions that have consequential apnoea (rolling over, kicking, etc.) are considered as transitional movements.

How to count hybrid movements:

- 1) The Definition of a Hybrid Movement = a definitive change in the position or direction of the lower limbs as mandated by the choreography of the routine.
- 2) Regarding entries and exits:
 - Front Pike Pulldown the action of the body bending into the pike position is movement number one, with counting continuing from there
 - Entry from a Ballet Leg A Ballet Leg kick counts in the hybrid if used as an entry into the hybrid (kick up and then a Catalina like rotation, kick up and then into inverted tuck, etc.)
 - If starting from underwater, start counting from the first position for example a pike, tuck, tabletop, or a submerged back pike (before a thrust)
 - No movements shall be counted underwater for example, a tuck from ankles at the end of a spin would count as one movement, however if the athlete(s) tuck when completely submerged no movement shall be counted
 - Spins / Twists / Twirls: each ½ turn (1800) shall count as 1 movement
 - A "swirl" action counts as one movement from it's beginning to its clear stopping point or next clear action as momentum/force must be considered.
 - Fast kick type actions (for example fast "tendu" like action similar to ballet: movement in ballet where the working leg is extended along the floor until only the tip of the toe remains touching the floor) shall count as 1 movement (i.e. there is a clear exertion of energy/muscle tension and then a recovery)
 - When rotating and performing leg movements at the same time, only the rotations shall be counted.





• Cadence: each cadence movement shall count as 1 movement. You do not count the movements of each athlete as they all do the same action, but on their own counts.

Hybrid difficulty components:

- 1) Hybrid difficulty components are declared skills with assigned degree of difficulty (DD) values that comprise
 - transitions in a hybrid and are grouped in the following "families" by level:
 - THRUSTS (T)
 SPINS (S)
 - TWISTS (R) which include Twirls and Swirls
 - FLEXIBILITY (F)
 - AIRBORNE WEIGHT (A)
 - CONNECTIONS (C)
- 2) All families include a first level which is defined as Basic (B), then each family progresses from level 1 upwards to a maximum of level 10.

Bonuses:

1) Team Tech, Team Free and Free Combination routines shall include a bonus for each Pattern Change executed valued at 0.20 each

Hybrid Base Mark:

- 1) Base Mark for all hybrids is the same and has a value of 0.5.
- 2) The Hybrid Base Mark value of 0.5 is <u>added</u> to the value of the hybrid DD, and it is the value (0.5) the hybrid will go to if not successful in achieving the declared difficulty.
- 3) Total Hybrid Declared Difficulty (DD) Value

= BASE MARK (0.5) + MOVEMENTS (Families) + BONUS (Team only)





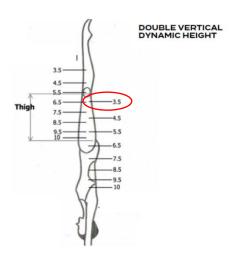
29.6.1 Families of movements

Thrusts (T)

The Thrust (T) family includes variations of thrusts as defined in AS Rulebook BM: "From a Submerged Back Pike Position with the legs perpendicular to the surface of the water a vertical upward movement of the legs and hips is rapidly executed as the body unrolls to assume a Vertical Position*. Maximum height desirable".

*Note: other 1 and 2 leg body positions are allowed as per the Thrust levels defined.

- Whenever "Thrust" is stated it means two legs, otherwise one leg is stated.
- The minimum height for a Thrust to be able to be accepted is a 3.5 (Dynamic height) which is above the knees meaning TCs must clearly see that height level achieved, or the thrust will be subject to Base Mark.



 Thrust endings with crashing OR with descent are clearly differentiated and defined in the difficulty table at different levels and values.

For a Thrust and vertical descent

- If a descent is executed from maximum height until below the knee (kneecaps submerged) and then a crash occurs, this still applies as an accomplished descent.
- A Thrust with flexibility must exhibit flexibility at maximum height like Airborne Split Position or Vertical to Knight. A thrust with Airborne Split Position or a split variant must show body alignment under hips, as described in BP and must show flexibility at minimum of "scissors (90₀) / 0.1-2.9 for split as per the AS Manual. Body alignment means lower back arched, with hips, shoulders, and head on a vertical line. Split variants may not exhibit bent front legs, and only back legs that bend downward (with the knee facing the ceiling / not inward).



- For thrusts with flexibility followed by a spin or twirl, the spin or twirl can begin at any time ie the legs can be out of the VP cone.
- For thrusts followed by a Twirl = A rotation at a sustained height height remains constant throughout the rotation. Therefore, any obvious change in height downwards is subject to a Base Mark. "Obvious" is defined as a drop in two height levels. So, if the athlete starts above their knee (6.5) and drops to below knee (4.5) that would be a Base Mark. A change in one height level = execution.
- In the case that a thrust is performed that exhibits actions from different levels declare the most difficult movement. For example, if a Thrust with Flexibility continued by catching (clearly stopping stable height demonstrated) in a Vertical Position above the knees is performed, declare a T9.



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PART SEVEN: ARTISTIC SWIMMING RULES



- Regarding a Thrust Level 9 with catching: Once the "stable height demonstrated for 1 second (1s) or more" in VP has occurred any difficulty movement can then be performed and be declared as per the rules, for example: T9 followed by A6, S3, etc.
- Spins following Thrusts must drop gradually. Athletes who obviously hold the rotation at the ankle level (ie twisting vs spinning) will be subject to a Base Mark as per below standards:
 - For Spin 180 $_{\circ}$ to Spin 720 $_{\circ}$

Entire rotation must be gradual

Level	Code	Description	DD Value
В	тв	Thrust with one or two legs followed by crashing on the surface	0.30
1	Т1	Thrust with one leg followed by vertical descent	0.45
	T2a	Thrust with one leg followed by Spin 1800	
2	T2b	Thrust with one leg followed by Twirl 180º and a crash	0.50
	T3a	Thrust and vertical descent	
	ТЗb	Thrust with one leg followed by Spin 360。	
3	тЗс	Thrust with one leg followed by Twirl 180º and descent	0.65
	ТЗd	Thrust with flexibility followed by crashing	
	T4a	Thrust with one leg followed by Spin 720。	
	T4b	Thrust with flexibility and descent	
	T4c	Thrust followed by Spin 180 $_{\circ}$	
4	T4d	Flying Fish (with descent) A thrust is executed to a Vertical Position and with no loss of height one leg is rapidly lowered to an airborne Fishtail Position*. After the Flying Fish the join may be with a straight or bent leg followed by a vertical descent. The declaration ends with the descent. *The bottom leg must be out of the "VP cone" area **Reminder you may not combine with a rotation or vertical descent declaration	0.80
	T4e	Thrust followed by Twirl 180° and a crash	





	T5a	Thrust followed by Spin 360.	
	T5b	Thrust followed by Twirl 180₀ and descent	
5	T5c	Thrust with flexibility followed by Spin 180。	0.90
	T5d	Flying Fish Spin 180º or Thrust Fishtail Helicopter Spinning 180º Same definition as T4 Flying Fish with a Spin 180º as ending	
	T5e	One leg Thrust with Twirl 180º followed by Spin 360º	-
	T6a	Thrust with flexibility followed by Spin 360。	
6	T6b	Thrust with Twirl 180º followed by Spin 360º	1.10
	т6с	Flying Fish 360° or Thrust Fishtail Helicopter Spinning 360° Same definition as T4 Flying Fish with a Spin 360° as ending	
7	77	Thrust followed by Spin 720°	1.50
8	тв	Thrust with flexibility followed by Spin 720。	1.70
	T9a	Thrust to height of 8.5 (waist) or higher followed by Spin 1080, or more	
9	Т9b	Thrust to height of 8.5 (waist) or higher continued by catching (clearly stopping - stable height demonstrated for 1s or more) in a VP above the knees or higher	2.00

Spins (S)

This family includes all types of Spins – which is a rotation in a Vertical Position (as per general principles). It includes ascending/descending spins and combined/reversed combined spins.

When spin is stated, it can be either an ascending or descending spin (same code and value) – ascending and descending are NOT differentiated.

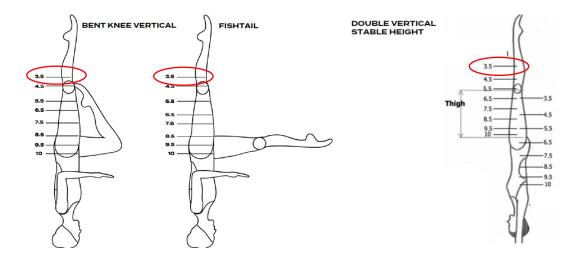
- For descending spins in free hybrids, the definition of degrees is by the submersion of the toes, OR when the rotation has come to a complete stop at the ankles level. Please note this is different than for Figures or Technical Required Elements (see BM 13).
- For ascending spins in free hybrids, the definition of degrees begins when the toes break the water's surface, OR at the ankles level. Please note this is different than for Figures or Technical Required Elements (see BM 13).

Spin allowances (BM 12 and 13) do not apply to spin declarations in free hybrids. Athletes must fully complete rotations as declared on the Coach Card. For example, if a S2 is declared (Spin 720° with one or two legs), then the Technical Controllers will be watching for completion of at least a full 720°. Rotating more than declared is ok, rotating less than declared is subject to a Base Mark.





A minimum height of 3.5 as per single and double leg height chart must be demonstrated to start a spin descending and a minimum height of 3.5 as per single and double leg height chart must be demonstrated to finish a spin ascending:



- A spin (ascending or descending) is defined as a gradual change of a minimum of two height levels which must always end at the ankles or the submersion of the toes. A change of only one height level during a spin declaration would be subject to Base Mark.
- Ascending and descending spins must rise/drop gradually. Athletes who obviously hold the rotation at the same height level (ie twisting vs spinning) will be subject to a Base Mark as per below standards: For Levels SB-S2 Entire rotation must be gradual For Levels S3-S5 A maximum of one rotation at each height level is allowed For Levels 6-10 A maximum of two rotations at each height level is allowed

- Spin Level Basic (B), Level 1 and Level 2, are for spins with one or two legs. Beginning at level 3 all spins must be performed with two legs.
- Spins shall have the rotation of the BODY counted "wall-to-wall" to accomplish the declared degree of
 rotation. For rotations of 360° or more the wall or direction you start at is the wall or direction you must
 finish for TCs to verify completion of rotation. Rotating more than declared is ok, rotating less than declared
 is subject to a Base Mark.
- Various modifications of leg positions during spins are allowed as long as the one or two leg position meets the definition of VP as per General Principle a). Unbalanced or off-angle spins are not differentiated, and those movements would be considered in artistic impression.
- When "two legs" is stated, it means VP definition (two legs within 45° of vertical), and "one leg" means one leg within 45° of vertical. Both as per general principle a).
 - Spins with one leg includes Bent Knee Vertical Position, Fishtail/Crane, Knight, and other one leg VP position options or variants.
 - Rotations with two legs includes Vertical Position "VP", Fishtail within 45° of Vertical, Arched VP and other positions where 2 legs are clearly visible within 45° of the vertical line.
 - Joining/opening/bending/extending movements from one leg positions to two leg (VP) positions (or two-leg to one leg positions) such as Bent Knee VP/Fishtail to VP or VP to Bent Knee VP/Fish-tail, are considered in all "one leg" spin classifications.

COMPETITION REGULATIONS



PART SEVEN: ARTISTIC SWIMMING RULES



A Combined or Reverse Combined Spin (defined in the table as "Combined") will be counted only in the case of an equal number of descending and ascending or ascending and descending rotations with no stop that start and finish at the same height (for example if toes breaking the surface is beginning of spin, then toes submerging must be the end).

A Combined or Reverse Combined Spin in Levels Basic, 1 and 2 where it states, "one or two legs" MAY include a combination of one and two legs

- Example 1: starting in a Bent Knee VP, spin descending 360 while joining to VP, and then spin ascending 360 staying in VP
- Example 2: starting in a Bent Knee VP, spin descending 360 while joining to VP, then ascending spin
 360 while returning to a Bent Knee VP
- Ascending and descending during Combined or Reverse Combined Spins (including Two-Direction) must rise/drop gradually. Athletes who obviously hold the rotation at the same height level (ie twisting vs spinning) will be subject to a Base Mark as per below standards: For Levels SCB-SC2 / SCDB-SCD2 Entire rotation must be gradual For Levels SC3-SC5 / SCD3-SCD5 A maximum of one rotation at each height level is allowed For Level SC6 / SCD6 A maximum of two rotations at each height level is allowed

A "Two-Direction" Spin means a spin in one direction, followed without a pause by an equal spin in the opposite direction. For example: SCD2 - Combined 720° (one or two legs) = a descending or ascending rotation of 720° followed without a pause by an ascending or descending rotation of 720° in the opposite direction.

Level	Code	Description	DD Value
	SB	Spin 180₀ (one or two legs)	0.15
в	SCB	Combined 180º (one or two legs)	0.35
	SCDB	Two-direction Combined 180º (one or two legs)	0.40
	S1	Spin 360 _° (one or two legs)	0.35
1	SC1	Combined 360° (one or two legs)	0.80
	SCD1	Two-direction Combined 360º (one or two legs)	0.85
	S 2	Spin 720º (one or two legs)	0.75
2	SC2	Combined 720 _° (one or two legs)	1.60
	SCD2	Two-direction Combined 720₀ (one or two legs)	1.65
	S 3	Spin 1080º (two legs)	1.15
З	SC3	Combined 1080 _° (two legs)	2.40
	SCD3	Two-direction Combined 1080₀ (two legs)	2.45



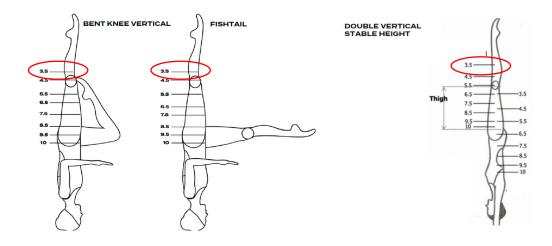


	S 4	Spin 1440º(two legs)	1.55
4	SC4	Combined 1440 _o (two legs)	3.20
	SCD4	Two-direction Combined 1440º (two legs)	3.25
	S5	Spin 1800º(two legs)	1.95
5	SC5	Combined 1800° (two legs)	4.00
	SCD5	Two-direction Combined 1800 _° (two legs)	4.05
	S 6	Spin 2160º(two legs)	2.35
6	SC6	Combined 2160° (two legs)	4.80
	SCD6	Two-direction Combined 2160 _° (two legs)	4.85
7	S7	Spin 2520° (two legs)	2.75
8	S 8	Spin 2880°(two legs)	3.15
9	S 9	Spin 3240° (two legs)	3.55
10	S10	Spin 3600₀(two legs)	3.95

TWISTS including Twirls/Swirls (R)

This family includes Twists and Twirls (as defined in AS Rulebook BM - the body remains on its longitudinal axis throughout the rotation) and Swirls.

- Twisting or Twirling = A rotation at a sustained height height remains constant throughout the rotation. Therefore, any **obvious** change in height **downwards** will be subject to a Base Mark. A change in height upwards will be considered in execution. **"Obvious"** is defined as a **drop in two height levels**. So, if the athlete starts above their knee (6.5) and drops to below knee (4.5) that would be a Base Mark. A change in one height level = execution.
- The minimum height for a Twist to be able to be accepted is a 3.5 (as per single and double leg height chart) meaning TCs must clearly see that height level achieved, or the Twist will be subject to Base Mark.



 Swirl = A 1 or 2 leg rotation in a piked/arched body position (or other positions where body is not aligned with its vertical axis), while turning. Swirls may have height variation - the legs can be lower than VP definition or can move in and out of VP area.





- Twist allowances (BM 12 and 13) do not apply to twist/twirl/swirl declarations in Free Hybrids. Athletes must fully complete rotations as declared on the Coach Card. For example, if an 2R3 is declared - Twist 10800 (VP), then the Technical Controllers will be watching for completion of at least a full 10800. Rotating more than declared is ok, rotating less than declared is subject to a Base Mark.
- Twists, Twirls and Swirls shall have the rotation of the BODY counted "wall-to-wall" to accomplish the declared degree of rotation. For rotations of 3600 or more the wall or direction you start at is the wall or direction you must finish for TCs to verify completion of rotation. Rotating more than declared is ok, rotating less than declared is subject to a Base Mark.
- Various modifications of leg positions during rotations are allowed as long as the one or two leg position meets the definition of VP and the requirement to complete rotations (as per above point)
- For ROB, RO1, RCB and RC1, the legs may be slightly bent during the rotation
- Rotations with one leg includes Bent Knee Vertical Position, Fishtail, Crane, and other position options. Please note that Knight rotations are included in the Flexibility Family, however, if a Knight is done as a 1 leg rotation declaration (1RB, 1R1, etc.) this is ok (not Base Mark).
- Rotations with two legs includes Vertical Position "VP", Fishtail within 450 of Vertical, Arched VP and other positions where 2 legs are clearly visible within 450 of the vertical line.
- Joining/opening/bending/extending movements from one leg positions to two leg (VP) positions (or two-leg to one leg positions) such as Bent Knee VP/Fishtail to VP or VP to Bent Knee VP/Fish-tail, are considered in all "1 leg only" twist/twirl classifications.
- Please see general principles on p.24-27 for definition of unbalanced
- Unbalanced one leg twists are considered in all "1 leg" rotation classifications.
- A Two-direction Twist means a rotation in one direction, followed without a pause by an equal rotation in the opposite direction. For example:
- \circ RD1 Two-Direction 360° (VP) = a rotation of 180° in one direction followed without a pause by a rotation of 180° in the opposite direction.
- RD2 Two-Direction $720_{\circ}(VP)$ = a 360_{\circ} rotation in one direction followed without a pause by a rotation of 360_{\circ} in the opposite direction.
- For VP open 180°/360° to Split (ROB/RO1) by the halfway point (90°/180°) the legs must be at least at 45° meaning the opening must be gradual (not a twirl 360° then open to split rapidly).
 Also the starting "VP" position must begin with feet/ankles touching.
- Split close 180°/360° to VP (RCB/RC1) must not reach the VP until 135°/270° meaning if close (where feet/ankles must be touching) finishes at ³⁄₄ point and then a ¹⁄₄ turn in VP occurs that is ok, however if less than 135°/270° accomplished – the rotation would be subject to Base Mark.
- For ROB, RO1, RCB and RC1, Split position must show flexibility at minimum of "scissors (90 $_{\circ}$) / 0.12.9 for split as per the AS Manual.







WORLD
AQUATICS

SWIMMING RULES

Level	Code	Description	DD Value
	RB	Swirl 180º/Turn 180º non-sustained or up-down	0.10
	1RB	1 leg Twist/Twirl 180₀	0.15
в	2RB	Twist/Twirl 180°(VP)	0.20
	ROB	VP open 180₀ to Split	0.25
	RCB	Split close 180₀ to VP	0.25
	R1	Swirl 360°/Turn 360° non-sustained or up-down	0.20
	1R1	1 leg Twist/Twirl 360₀	0.35
	2R1	Twist/Twirl 360°(VP)	0.45
1	RD1	Two-direction 360° (VP)	0.50
	RU1	Unbalanced Twist/Twirl 360。(VP)	0.55
	RO1	VP open 360₀ to Split	0.55
	RC1	Split close 360₀ to VP	0.55
	R2	Swirl 7200	0.40
	1R2	1 leg Twist 720.	0.75
2	2R2	Twist 720₀(VP)	0.95
	RD2	Two-direction 720°(VP)	1.05
	RU2	Unbalanced Twist 720°(VP)	1.15
	R3	Swirl 10800	0.60
	1R3	1 leg Twist 1080.	1.15
3	2R3	Twist 1080° (VP)	1.45
	RU3	Unbalanced Twist 1080° (VP)	1.75
	R4	Swirl 14400	0.80
	1R4	1 leg Twist 1440₀	1.55
4	2R4	Twist 1440°(VP)	1.95
	RD4	Two-direction 1440°(VP)	2.15
	RU4	Unbalanced Twist 1440°(VP)	2.35
	1R5	1 leg Twist 1800₀	1.95
5	2R5	Twist 1800° (VP)	2.45
	RU5	Unbalanced Twist 1800° (VP)	2.95





	1R6	1 leg Twist 2160₀	2.35
6	2R6	Twist 2160₀(VP)	2.95
Ø	RD6	Two-direction 2160° (VP)	3.35
	RU6	Unbalanced Twist 2160。(VP)	3.55
7	2R7	Twist 2520₀(VP)	3.45
	RU7	Unbalanced Twist 2520°(VP)	4.15
8	2R8	Twist 2880°(VP)	3.95
0	RU8	Unbalanced Twist 2880º (VP)	4.75
0	2R9	Twist 3240°(VP)	4.45
9	RU9	Unbalanced Twist 3240º(VP)	5.35
10	2R10	Twist 3600°(VP)	4.95
0	RU10	Unbalanced Twist 3600º (VP)	5.95

Airbone Weight (A)

This family includes movements that require an amount of the body out of the water (single or double legs) and reflect the difficulty of maintaining balanced and unbalanced airborne weight.

- When "sustained height" is stated, it means airborne weight lasting equal or more than 3 seconds. The duration of execution should be sufficient to clearly identify the difficulty by the technical controllers.
- Please take note of General Principle d) as Airborne Weight may not be declared when occurring simultaneously with a rotation.
- Please see general principles on p.21-22 for definition of unbalanced
- The minimum height required for Airborne Weight is 3.5, meaning starting or finishing positions or sustained actions must meet this standard.
- For example if doing AB (Lift to any single leg position from Inverted Tuck Table Top or a variant), the single leg position must be at 3.5.

OR

• For example if doing an A5 (Front Pike to VP while rotating 360 •), the ending VP must be at 3.5.

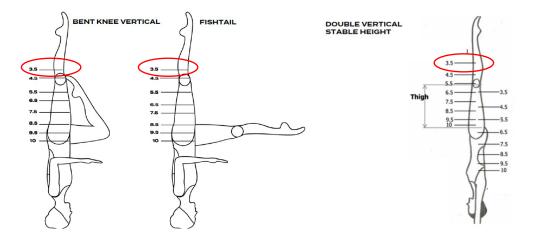


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PART SEVEN: ARTISTIC SWIMMING RULES



As per general principle g) for Vertical ascent with 1 or 2 legs (A3): A vertical ascent must rise above the knees (kneecaps clearly visible) or not bend at the knees before reaching above the knees (kneecaps clearly visible). Once above knees other movements/declarations can occur



- For movement from Front Pike to VP (Porpoise action): There may be variations in leg movements as long as the integrity of the porpoise lift action is maintained.
 - For example:
 - Legs may be slightly apart (not more than 45 degrees)
 - Legs may be crossed or one slightly bent and one straight, or both slightly bent as long as still in the "VP Cone" area
- For movements with lifting from Front Pike and rotating:
 - From Front Pike to a single leg position (Bent Knee VP, Fishtail, etc.) while rotating 1800
 - From Front Pike to a single leg position (Bent Knee VP, Fishtail, etc.) while rotating 3600
 - Front Pike to VP while rotating 1800
 - Front Pike to VP while rotating 360

By the halfway point $(90_{\circ}/180_{\circ})$ the legs should not be higher than 45_{\circ} – meaning the lifting action must be gradual (not a lift into the single leg position or VP followed by a twirl $180_{\circ}/360_{\circ}$)

Level	Code	Description	DD Value
в	AB	Lift to any single leg position from Inverted Tuck Table Top or a variant	0.05
	A1a	Lift to any single leg position from Front Pike	
	A1b	Single leg descent	
1	A1c	Lift to VP from Inverted Tuck, Table Top or a variant	0.10
	A1d	Join to VP from Fishtail, Bent Knee VP or Split	
2	A2a	Vertical descent in VP (with or without isolated movements)	
2	A2b	From Front Pike to a single leg position (Bent Knee VP, Fishtail, etc.) while rotating 180_{\circ}	0.15





	A3a	Front Pike to VP (Porpoise lift)	
3	A3b	Vertical ascent with 1 or 2 legs (with or without isolated movements)	0.20
4	A4a	From Front Pike to a single leg position (Bent Knee VP, Fishtail, etc.) while rotating 360°	0.45
	A4b	Front Pike to VP while rotating 180_{\circ}	
5	A5	Front Pike to VP while rotating 360_{\circ}	0.65
6	A6	Sustained height with one leg or a combination of one or two legs lasting equal or more than 3 seconds Or Isolated movements performed in a stable and fixed single leg position (within VP definition of O-45 degrees) – isolated movements performed with other (non-fixed) leg lasting 3 Seconds or more Or A combination of the two techniques (for example 2 seconds of isolated movements, then 1 second of a combination of one and two leg movements)	1.15
7	Α7	Sustained height in VP lasting equal or more than 3 seconds	1.45
8	A8	Sustained height shown at least 3 seconds or more in VP performed in an unbalanced position	1.65

Flexibility (F)

This family includes different types of flexibility movements that require an extreme range of suppleness (bring a joint to its maximum range of motion), such as Arches, Splits, Knight, Walkouts, and Nova/Cyclone lift.

- All positions should be shown with maximum strength in legs and a body position with shoulders under the hips that demonstrates the flexibility of the athletes.
- The duration of execution should be sufficient to clearly identify the difficulty by the technical controllers.
- Split position must demonstrate flexibility at the minimum height for split (0.1-2.9 = "scissors") as per the AS Manual or it is subject to a Base Mark.





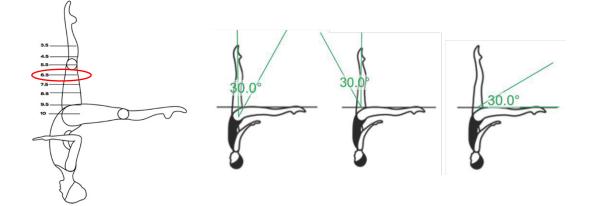
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PART SEVEN: ARTISTIC SWIMMING RULES



For Knight position:

- Minimum height of 6.5 (above knee) is required.
- The vertical leg can be a maximum of 30 degrees off the vertical line
- The horizontal leg can't come off the surface more than 30 degrees



- If declaring Rapid Knight (F1b), you may declare consecutively, however the vertical leg must come out of the VP Cone.
- In regard to Rapid Knight Position or Rapid Split from any position, the action from the starting position to the Knight or Split must be rapid
- Knight join $180_{\circ}/360_{\circ}$ to VP: By the halfway point $(90_{\circ}/180_{\circ})$ the bottom leg should not be higher than 45_{\circ} meaning the lifting action must be gradual (not a lift into VP followed by a twirl $180_{\circ}/360_{\circ}$)
- For F8b: Bent Knee Surface Arch Position to VP rotating 360° (Nova rotating 360°), By the halfway point (180°) the bottom leg should not be higher than 45° meaning the lifting action must be gradual (not a lift into VP followed by a twirl 360°)
- For movement from Surface Arch to VP:

There may be variations in leg movements as long as the integrity of the lift action is maintained

- For example:
 - Legs may be slightly apart (not more than 45 degrees)
 - Legs may be crossed or one slightly bent and one straight
 - Both legs may not be bent intentionally slight bending (soft knees) due to bad execution should not be Base Marked.

Flat Split (F6) as per Height Chart 8.5 level:







Level	Code	Description	DD Value
В	FB	Back Layout to Surface Arch or Bent Knee Surface Arch	0.05
	F1a	Rapid Split from any position	
1	F1b	Rapid Knight Position	0.10
	F1c	BK Surface Arch to Knight (extending the BK up to Knight)	
	F2a	Walkout Front (to breath)	
2	F2b	Split to Front Pike (180₀ arc with a straight leg)	0.20
	F2c	Split variants at the surface (demonstration of at least 2 different Splits)	
	F3a	Split to Split through VP (changing legs)	
3	F3b	Ariana Rotation	0.30
	F3c	Combination of a Right and Left Leg Knight Position	
	F4a	Bent Knee Front Layout to Bent Knee Arch Position OR Front Layout to Split with a straight leg	
	F4b	From Surface Arch Position to Knight or Split with a straight leg	
4	F4c	Bent Knee Surface Arch to Bent Knee VP	0.40
-	F4d	BK Surface Arch to Knight (lifting the extended leg to VP and extending the bent leg horizontally on the surface)	0.40
	F4e	Fishtail to Knight (horizontal plane, along the surface)	
	F4f	Fishtail to Knight (through VP)	
	F5a	Knight to VP OR Knight to Fishtail through VP	
5	F5b	Bent Knee Surface Arch to VP	0.50
	F5c	Knight rotating 180° (twisting in the Knight position)	
	F6a	Cyclone 180° (BK Surface Arch Twirl 180° to a VP)	
	F6b	Knight rotating 360° (twisting in the Knight position)	
6	F6c	Knight Join to VP while rotating 180°	0.65
	F6d	Flat Split or Split variants sustained at the surface 3 seconds or more (split variants may not bend knees more than 90° or lift the thigh past 45° while transitioning from one split to another)	





7	F7	Surface Arch to VP	0.75
	F8a	Knight Join to VP while rotating 360°	0.90
8	F8b	Bent Knee Surface Arch Position to VP rotating 360° (Nova rotating 360°)	
9	F9	Surface Arch Position to VP rotating 180°	1.00
10	F10	Surface Arch Position to VP rotating 360°	1.30

Connections (C)

•

This family includes movements when swimmers join or link together with their legs creating a connected action.

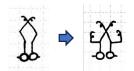
- The swimmers must be touching with 1-2 legs in the manner detailed in the table. An exception shall be wrapping a leg around the body (CB and C1 levels).
- Connected Actions in Teams (Connections of 4-10 athletes): This means groupings of 4-10 athletes are connected - for example 2 lines of 4-5 athletes, 1 line of 8-10 athletes, a circle of 8-10 athletes or circles of 4-5 athletes For these connected actions of 4-10 athletes 0.10 will be added to the declared connection Connected actions for groupings of 4-10 athletes will have a plus symbol (+) added to the codes
- When two of the SAME connections are performed consecutively (one after the other), then they must be separated by a disconnection OR the connected legs coming out of the VP "cone" area

For example, if declaring C2 C2, then the athletes must connect, disconnect/or come out of VP "cone", then connect again:



When two DIFFERENT connections are performed consecutively (one after the other) then they may be performed one after the other without a disconnection or coming out of the VP "cone" area

For example, if declaring C4 C3, then the athletes may demonstrate a C4 connection, immediately followed by a C3 connection:





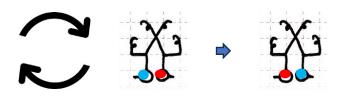
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PART SEVEN: ARTISTIC SWIMMING RULES



For connections with a rotation of at least 180° or 360° at sustained height:

Rotations in the connections family must have the athletes rotate around (change of position), be a "rotation of the construction" and NOT just a pivot of the hips (like a RD1)



Connected rotations must be completed at a sustained height – the rotation may not begin while ascending or end while descending. A drop of two height levels during the rotation would be subject to Base Mark

Base Mark.
 For example, a duet may rise connected in a two leg connection and claim an A3, THEN once the ascent is complete, they can then turn 180₀ for the C6a

- Please beware an ascent (A2 or A3) can't be declared simultaneously with a connection. The ascent must be completed first (rise above the knee) and then the connection must occur as a separate movement.
- Please see the following table for example images of descriptions of connections

Level	Description	Code	DD Value
в	Piked body position at the surface of the water or any position out of VP "cone" area (facing any direction) Connections are on the surface of the water without lifting the feet from the water OR any position out of VP "cone" area (facing any direction) OR wrapping a leg around the body (pelvis).	CB 2-3 connected	0.10
	- 2 K - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	CB+ 4-5, 8-10 con-nected	0.20
1	Cla: Connection in any one leg VP position (in "cone" area) with the "bottom" leg (non-VP leg) connected. Can be facing any direction Clb: Connecting a bottom leg with a thigh of VP leg (athletes facing same direction) OR wrapping a leg around the body (pelvis) – can be facing any direction.	C1a C1b 2-3 connected	0.20
	W W VIII	C1a+ C1b+ 4-5, 8-10 con-nected	0.30





	I	1	
	C2a: One leg (in VP "cone" area) face-to-face connection C2b: One leg back (in VP "cone") one leg forward (in VP "cone") connection In C2a or C2b swimmers connect in any one or two leg Vertical Position and make a clear connection with one vertical ("top") leg. C2c: C1 connections with a rotation of at least 180° at	C2a C2b C2c 2-3 connected	0.30
2	sustained height	C2a+ C2b+ C2c+ 4-5, 8-10 con-nected	0.40
	One leg (in VP "cone" area) <u>back</u> or <u>side</u> connection Swimmers are connected in any one or two leg Vertical Position with one leg back or to the side of each other and make a clear connection with one vertical ("top") leg.	C3 2-3 connected	0.40
3	Exception C3+ (top leg at 90 degrees feet to knee connection)	C3+ 4-5, 8-10 con-nected	0.50
4	Two-leg connection (both legs must be in VP "cone" area). May be facing any direction. Swimmers are connected with two legs facing ANY direction in any two-leg Vertical Position (variants of 2 legs close to vertical – legs can be up to 45° off from	C4 2-3 connected	0.50
		C4+ 4-5, 8-10 con-nected	0.60
5	Rotation vertical connection with one leg in VP "cone" area (Rotation of 180°+ at maximum height). May be facing any direction. When swimmers are connected with ONE LEG, which	C5 2-3 connected	1.00
	could be executed in a one or two leg vertical position. Facing any direction, athletes make a clear connection with one vertical (top) leg while performing a rotation of at least 180° at sustained height.	C5+ 4-5, 8-10 con-nected	1.10







6	C6a: Rotation vertical connection with two legs in VP "cone" area (rotation of 180₀+ at maximum height). May be facing any direction. When swimmers are connected with TWO LEGS facing ANY direction in any two-leg Vertical Position (variants of 2 legs close to vertical – legs can be up to 45₀ off from vertical), while performing a rotation of at least	C6a C6b 2-3 connected	1.25
	180° at sustained height. C6b: Rotation vertical connection with one leg (rotation of 360°+ at maximum height. May be facing any direction. C5 definition with rotation of 360° or more at sustained height.	C6a+ C6b+ 4-5, 8-10 con-nected	1.35
	360₀ Rotation vertical connection with two legs in VP "cone" area (rotation of 360₀+ at maximum height). May	C7 2-3 connected	1.50
7	be facing any direction. C6a definition with rotation of 360° or more at sustained height.	C7+ 4-5, 8-10 con-nected	1.60

29.6.2 Bonuses

Pattern Changes (PC)

This bonus is applied for Teams only for changes of formations made by the spatial relationship between members of a team.

Team Tech, Team Free and Free Combination routines shall include a bonus for each Pattern Change executed valued at 0.20 each

Each pattern change in a hybrid is counted. For example, if a hybrid has 3 pattern changes the code would be 3PC in the bonus section of the Coach Card.

IMPORTANT NOTES REGARDING TC VERIFICATION OF PATTERN CHANGES:

- Traveling of all athletes in the same direction while maintaining the pattern is not a pattern change.
- When pattern changes are 'transitional' passing through from one to another the pattern change must pause and clearly demonstrate the new pattern before continuing.
- If a team declares a pattern change, the DTC's do need to see that the change was clearly attempted. They do not judge execution of the pattern change or new pattern, but they do need to clearly see that that a new pattern was created.
- If there is a lack of clarity in the pattern changes declared, meaning change to a new pattern is not recognizable, this will result in a Base Mark.





Further notes:

• If from the Rhombus/Diamond * a change to a circle is executed – this is Ok – the DTCs should not see the points for the Rhombus/Diamond.



• If a rotation on themselves in Rhombus/Diamond * (remaining in a Rhombus/Diamond) then it is not a pattern change. 391

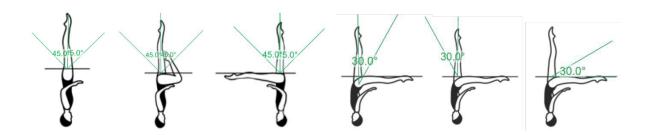
HYBRID DIFFICULTY TABLE:

Please see the end of the guide for printable Hybrid Difficulty Table

Important: Most up-to-date version is October 2024

29.6.3 General Principles

a) When Vertical Position (VP) is indicated it includes variants of 2 legs at or close to vertical (legs can be up to 45° off from vertical). One leg Vertical Positions such as Bent Knee, Crane, or Fishtail can also be up to 45° off vertical line. Knight position is as per Flexibility family (max 30° off top or bottom leg).



- Each Free Routine (Senior, Junior, Youth, 12U) MUST include a skill from every family (except for Connections in Solo). All routine members must perform that skill in the same declaration on the coach card (not factored).
- c) Example: The skill is a Thrust Level 3a (Thrust and vertical descent). A T3a is declared on the coach card. It could be done all 8 together (fully synchronized), or as a cadence action; for example, 4 and then 4, or 3/3/2 or 2/2/2/2, or one at a time.
- d) There is a maximum of 5 declarations per family per hybrid, with a limit of 3x per technique. For example, you may do 5x "R" family declarations but a maximum of 3 specific techniques (ie 2R1 x 3 and R01 x 2).





- e) When two movements from different families in the difficulty table occur simultaneously then you may only declare one. Examples: If a VP open to Split 360° (RO1) is being executed, then you may not also declare F1 (Rapid Split from any position). If a SB (Spin 180°) is declared performed as a spin ascending, then an A3 (vertical ascent) can't be declared simultaneously If a RU5 (Unbalanced Twist 1800) is declared and it takes 3s+ then an A8 can't be declared simultaneously.
- f) In teams or duet: when a code (technique) is not performed by all team or duet members its value will be factored by *0.5 (half of swimmers included), or by *0.3 (less than half of swimmers included). This principle also applies in duet actions where just one swimmer is performing a hybrid movement while the other performs surface accompaniment (whether connected or not). When a code (for example when 3x maximum per technique is being used) has a factor applied of 0.5 (half swimmers) or 0.3 (less than half of swimmers) a coach may declare that movement a maximum of 6x in one hybrid when factored. Factoring does not apply to the pattern change bonus. Factoring can only be used when different codes/techniques are being executed by the athletes. If all athletes are doing the same choreography (same code/technique) factoring can't be used.
- g) When a cadence is performed you just declare the full code once on the Coach Card. Difficulty Guide General Principle e) does not apply (factoring). Meaning – when the whole team does the same "cadence" movement sequentially/ consecutively (one after the other – 1 at a time, 2 at time, 4/4/2, 4/4, etc.), you just put the difficulty code once. For example, if all 8 athletes on a team do a S1 (spin descending/ascending 360_o) one at a time – just declare S1 once on the Coach Card.
- h) In Thrust Level 9 (Thrust continued by catching clearly stopping stable height demonstrated for 1 second or more) in a Vertical Position above the knees or higher), we use the knees as a reference point for verification of accomplishing the movement. Knees as a reference point for difficulty verification will also be applied to other movements as follows with ascending or descending actions:
 - For a Thrust and vertical descent
 - If a descent is executed from maximum height until below the knee (kneecaps submerged) and then a crash occurs, this still applies as an accomplished descent.
 - For Vertical descent (one or two legs A1 or A2)
 - If a descent is executed from a high VP (9.5-8.5) until below the knee (kneecaps submerged) and then a crash occurs, then an A1 or A2 still applies.
 - For Vertical ascent with 1 or 2 legs (A3)
 - A vertical ascent must rise above the knees (kneecaps clearly visible) or not bend at the knees before reaching above the knees (kneecaps clearly visible). Once above knees other movements/declarations can occur.
- When unbalanced is stated it means both legs from thighs to feet, in the same direction: forwards, backwards, or sideways (Body position arched, piked, or tilted) clearly OFF the vertical line, and clearly ABOVE (off) the surface of the water.

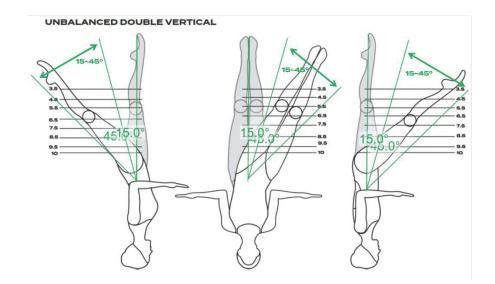
If technology is available at a competition where athletes can be measured for compliance **15-45 degrees** off VP is the required angle to be achieved **0-15** degrees is too straight and therefore not unbalanced, and lower than 45 degrees is out of the VP definition.

WORLD AQUATICS

PART SEVEN: ARTISTIC SWIMMING RULES



For Technical Controllers without technology – if an athlete is completely straight during a declared unbalanced action that is subject to a Base Mark. If an athlete is clearly lower than 45 degrees and near the surface of the water that is subject to a Base Mark.



If one leg bends while the other leg is unbalanced and the swimmer's centre of gravity out of the vertical line is compensated by the knee bending that keeps the swimmer in a stable position – this does not qualify as unbalanced.





29.6.4 The Coach Card

The Coach Card is where the declared difficulty for a routine is detailed – Technical Required Elements, Free Hybrids and Acrobatics. Transition parts will also be declared on the coach card to assist with following the order of performance. Please find this template in full size as an appendix at the end of the document after the difficulty tables.

For acrobatics difficulty please refer to the Team Acrobatics Catalogue and Pair Acrobatics Catalogue. This acrobatics information is needed to complete a routine's declared difficulty on the Coach Card for Duet and Team routines.

Online Coach Cards are also provided by the scoring systems that support World Aquatics competitions. Specific instructions for online coach cards are provided in competition information packages so please ensure these packages are read thoroughly with instructions followed.



COACH CARD

Please fill in with type or write in capital letters!

Member Federation:						
Competition:						
	PRELIMS		FINALS		6	
Event:	Women Solo Tech		Men Solo Tech	Women Duet Tech		Mixed Duet Tech
Event.	Women Solo Free	•	Men Solo Free	Women Duet Free		Mixed Duet Free
	Mixed Team Tech		Mixed Team Free	Acrobatic		Combo
Theme:						
Name of competitor(s):						

			ELEME	NTS IN ORDER OF PERFORMANCE			
TIME	PART	EL	BASE MARK	DECLARED DIFFICULTY	BONUS	DD	т
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		-	2 7				_

Member Federation:

Date: _____ Signature: _____





29.6.5 Important – Regarding declared difficulty movements / Coach Card

It is very important that athletes perform skills (codes/techniques) as declared on the Coach Card AND in the order in which they are declared – otherwise a deduction will occur. We strongly advise "Do what you declare!"

If the coach has declared a movement on the Coach Card and an athlete does not perform it at all (it is omitted), or does not perform it in conformance to what is declared on the Coach Card (code/technique is different or in wrong order than declared) then the following shall occur:

For a Free Hybrid:

- Only the Base Mark (value of 0.5) will be applied
 - For example, a routine hybrid is declared to have:
 - Thrust Level 3 (T3), Airborne Weight Level 3 (A3), and a Spin Level 4 (S4),
 - However, an athlete does not perform their Spin Level 4 (for example a spin descending 1440o) and instead does a S3 (spin descending 1080o)
 - The routine will have this hybrid put to Base Mark (value of 0.5).
 - Please note in duet or team if ONE athlete does not perform movement as declared the deduction will apply
- The hybrid declaration must be in the exact order that it appears in the hybrid chronologically as above First a T3, then A3, then S4 occurs. IF this is incorrectly ordered on Coach Card vs what is done in the water, the deduction will apply.

For a Technical Required Element:

- In technical routines, a Technical Required Element (TRE) will be declared as TRE1a or TRE1b, TRE2a or TRE2b, TRE3a or TRE3b, TRE4a or TRE4b, and TRE5a or TRE5b (note: in disciplines where there is only one option for an element no letter is included when declared on the Coach Card – for example "TRE3")
- Required Elements can be performed in any order however, athletes must perform the Technical Required Elements in the order as declared on the Coach Card or a penalty will be applied as per the rulebook.
- Please also note that additional movements can be added immediately before and after (breath to breath) Technical Required Element. Those movements will not add any extra difficulty nor will be considered as additional hybrids and therefore are not to be added to the Coach Card.

For an Acrobatic movement (Teams and Duets):

- Acrobatic codes should be added to the Coach Card as per the Acrobatic Catalogues
- A Base Mark will be applied to acrobatics not performed in conformance to what is declared on the Coach
- Card.
- Please refer to the Acrobatic Catalogue for Acrobatic Base Marks





29.6.6 Coach Card Legend

Acrobatics Base Mark:

Group A	ACRO-A	
Group B	ACRO-B	
Group C	ACRO-C	For Acrobatics, please enter the acrobatic code in the "declared difficulty" column as per the Acrobatics Catalogue.
Group P	ACRO-P	Acrobatics Catalogue.
Pair Acro	Acro-Pair	

**Please refer to the Acrobatics Catalogue for Acrobatic codes and Acro Base Marks.

Hybrid Base Mark:

Hybrid Base Mark is fixed at 0.5 and is added to the value of the hybrid DD, and it is the value (0.5) the hybrid will go to if not successful in achieving the declared difficulty.

Hybrid Families and Bonuses:

Families (groups)/Bonuses:		Family and Level Codes:
Thrusts	Т	ТВ, Т1-Т9
Spins:		
Spins – ascending/descending	S	SB, S1-S10
Spins – combined	SC	SCB, SC1-SC6
Spins – combined two-direction	SCD	SCDB, SCD1-SCD6
Twists (Incl. Twirls and Swirls)		RB, R1-R9
Swirl	R	RB, R1-R4
One leg Twists	1R	1RB, 1R1-1R6
Two leg Twists	2R	2RB, 2R1-2R10
Two-direction Twist	RD	RD1-RD6
Unbalanced Twist	RU	RU1-RU10
VP to Split	RO	ROB, RO1
Split to VP	RC	RCB, RC1
Flexibility	F	FB, F1-F10
Airborne Weight	A	AB, A1-A8
Connections		
Connections (2-3 athletes)	С	CB, C1-C7
Connections (4-5, 8-10 athletes)	C+	CB+, C1+-C7+
Pattern Changes	PC	1PC, 2PC, etc

In Thrusts, Airborne Weight, Flexibility and Connections where are few skills are grouped together in a level, each technique has been labelled as a, b, c, d, e or f to ensure clarity or what is being declared.





Technical Required Elements:

Element 1	Element 2	Element 3	Element 4	Element 5
TRE1a	TRE2a	TRE3a	TRE4a	TRE5a
TRE1b	TRE2b	TRE3b	TRE4b	TRE5b

*Note: in disciplines where there is only one option for an element, no letter is included – for example "TRE3"

29.6.7 Coach Card Auto Calculator

A Difficulty Calculator designed like a Coach Card format has been developed into an Excel Template Tool and is available for coaches to use and modify to suit their needs to assist in strategizing their routine difficulty. This is a tool and resource for coaches and is not meant to be used for competition submission. Get familiar with it and make it your own, always adhering to values as per the current Hybrid Difficulty Table and Acrobatic Catalogues. Updates to the calculator will be made as needed to stay up to date with any revised values.

The user can enter movement codes to calculate the difficulty for hybrids, as well as add in Technical Required Element codes. Please refer to the "LEGEND" tab in the spreadsheet for all codes (this is important). When a code is entered the value will appear automatically in the cell below the code. Acrobatic values are based on the Acrobatics Catalogues and must be added manually. The user can also add all values in manually if preferred.

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29.6.8 Hybrid Difficuity Table

Important Notes:

- All hybrids shall start with a base value or "Base Mark" of **0.50** and then start adding difficulty from that base value
- Each Free Routine (Senior, Junior, Youth, 12U) MUST include a skill from every family (except for Connections in Solo). All routine members must perform that skill in the same declaration on the coach card (not factored).
 - Example: The skill is a Thrust Level 3a (Thrust and vertical descent). A T3a is declared on the coach card. It could be done all 8 together (fully synchronized), or as a cadence action; for example, 4 and then 4, or 3/3/2 or 2/2/2/2, or one at a time.
- There is a maximum of 5 declarations per family per hybrid, with a limit of 3x per technique
 - In Spins (S) or Twists (R), you may do 5x "S" family and 5 x "R" family declarations per hybrid but a maximum of 3 specific techniques. Each Spin (S) or Twist (R) code on the table represents a specific technique.
 - For example, for Twists you could declare: 2R1 x 3 and R01 x 2
 - In other families (Thrusts, Airborne Weight, Flexibility and Connections) where a few skills are grouped together in a level, each technique has now been labelled as a, b, c, d, e, or f to ensure clarity of what is being declared (for example in Flexibility Level 1 you will now see: F1a, F1b and F1c).
 - For example, for Flexibility you could declare: 1 x F7, 3 x F5a, and 1 x F1a
- Thrust family:
 - Whenever "Thrust" is stated it means two legs, otherwise one leg is stated.
- Spin family:
 - Spins for ascending and descending are not differentiated, for example an S1 (spin 360 with one or two legs) may be ascending or descending.
 - When "Combined" is stated, it means a Combined (descending then ascending) or Reverse Combined (ascending then descending) Spin
- Team Tech, Team Free and Free Combination routines shall include a bonus for each Pattern Change executed valued at **0.20** each





L	THRUSTS	(S) SNIAS		TWISTS incl	TWISTS incl. Twirls/Swirls(R)	AIRBORNE WEIGHT (A) Lft JELEXIBILITY (F) CONNECTIONS (C) Piked	U 48LEXIBILITY (F) O	ONNECTION	IS (C) Piked
(B)4	(B)ASIGT)Thrust with one of B = 0.15	0 <mark>5B = 0.15</mark>	Spin 180° (one or	RB = 0.10	Swirl 180 °/Turn 180°	any single leg position from Backetter aout to Surfaced	ockented out to Surfacted	r position at the surface	ne surface of
		_	two legs)Combined		non-sustained or	Tirk Table Ton or a variant	Arch or Bent Kneetbe water or any nosition out	e water or any	
	two legs tollowed by SCB = 0.35	^{3V} SCB = 0.35	180°(one or two	310 - 94	up-down1 leg				
	crashing on the		refiel		Twist/Twirl 180°		Surface Arch of VP "cone" area (facing any	VP "cone" are	a (facing any
		SCDB = 0.40	Two-direction	2RB = 0.20	Twist/Twirl 180°(VP)				
	surface		(one or two legs)	ROB = 0.25	VP open 180° to Split				
	TB = 0.30 Thrust with	vith		RCB = 0.25	Split close 180° to VP	AB = 0.05	FB = 0.05	CB = 0.10	CB+= 0.20
۲	one leg followed by	y S1 = 0.35	Spin 360° (one or	R1 = 0.20	Swirl 360°/Rotation360		Eanid Salit from	a. Connectio	Connection in any one
		t	wo legs)Combined		non-sustainedor up-down 1	_		leg VP position(in "cone" area) with the "bottom"	on(in "cone" e "bottom"
		SC1 = 0.80	360°(one or two leas)	1R1 = 0.35	leg Twist/Twirl 360°	 Lift to VP from InvertedTuck. Table Top 	c. PositionBK Surface Arch	leg (non-VP leg) connected. Can be	eg) lan be
					Twist/Twirl 360°(VP)	a. or a variant		facing any direction.	rection.
		SCD1= 0.85	Two-directionCo	2R1 = 0.45			to		
			(one or two legs)	RD1 = 0.50	Two-direction 360° (VP)	licitation from Eichtail	Knight(extendin g the BK up to	 b. Connecting a bottom leg with a thigh of VP 	g a bottom gh of VP
				RU1 = 0.55	UnbalancedTwist/Twirl	Bent Knee VP or Split	Knight)	leg (athletes racing same direction) OR	racing on) OR
					360°(VP)			wrapping a leg around the body	eg around
				R01 = 0.55	VP open 360° to Split			(pelvis) – can be	. can be
				RC1 = 0.55	Split close 360° to VP			facing aı	facing any direction.
	T1 = 0.45					A1 = 0.10	F1 = 0.10	C1 = 0.20 C1+ = 0.30	- = 0.30
N	a. Thrust with b. one	S2 = 0.75	Spin 720° (one or two legs)	R2 = 0.40	Swirl 7200	a. Vertical descent in VP (with or without	<mark>a.</mark> Walkout Front (to breath) b. Split	a. One leg (in VP "cone" area) face-to-face	VP "cone" -face
	legfollowed by Spin 1800 Thrust	SC2 = 1.60	Combined 720° (one or two leas)	1R2 = 0.75	1 leg Twist 720°	isolatedmovements) b. From Front Pike to a	to Front Pike (180° arc	connectionb. One leg back (in VP	One leg
	legfollowed by Twirl	SCD2 = 1.65	Two-direction	2R2 = 0.95	Twist 720°(VP)	single leg position (Bent Knee VP, Fishtail, etc.) while	with straight leg)	forward (in VP c	forward (in VP cone)
	180°and a crash		Combined 720°		Two-direction 720°	rotating 180°	c. Split variants at	connection c. C1 connection	connection C1 connections with a
				RD2 = 1.05	(dV)		(demonstration of at least 2	rotation of at least 180° at maximumheight	least 180° height
					-		different Splits)		
	T2 = 0.50			RU2 = 1.15	Unbalanced Iwist 720°(VP)	A2 = 0.15	F2 = 0.20	C2 = 0.30	C2+ = 0.40
								-	





_	THRUSTS (T) a. Thru	SNINS		TWISTS Incl. T	S incl. Twirls/Swirls(R)	AIRBORNE WEIGHT (A) a. Front	ELEXIBILITY (F)a. Split to	COne leg	C)One leg (n VP
m	and vertical descent b (S)S3 = 1.15 Thrust with one leg followed by Spin 360°. C. Thrust with one leg followed by Thrust with one descent d. Thrust with descent by crashing	tic(S)S3 = 1.15 0, SC3 = 2.45 SCD3 = 2.45	Spin 1080° (two legs) Combined 1080° (two legs) Two-direction Combined 1080° (two legs)	R3 = 0.60 1R3 = 1.15 2R3 = 1.45 RU3 = 1.75	Swirl 1080° 1 leg Twist 1080° Twist 1080° (VP) Unbalanced Twist 1080° (VP)	Pike to VP (Porpoise lift) b. Verticathrough VP(changing legs)tione" area) <u>back</u> or <u>side</u> connection ascent with 1 or 2 legs (with or Ariana Rotation c. without isolated movements) Combination of a Right and Left Leg Knight Position	cahrough VP(changing legs)t Ariana Rotation c. Combination of a Right and Left Leg Knight Position	s)toone' area) <u>back</u> and	or <u>side</u> con nect
	T3 = 0.65					A3 = 0.20	F3 = 0.30	C3 = 0.40 C3+ = 0.50 Two-le	.50 Two-leg
4	a. Thrust with b. one lead Spin 720. Spin 720. Thrust with flexibility and descent ad by Spin olowed ad by Spin olowed By Spin olowed Fish (with d By Spin olowed ad rash a crash	S4 = 155 SC4 = 3.20 SCD4 = 3.25	Spin 1440° (two legs) Combined 1440° (two legs) (two legs)	R4 = 0.80 1R4 = 1.55 2R4 = 1.95 RD4 = 2.15 RU4 = 2.35	Swirl 1440° 1 leg Twist 1440° Two-direction 1440° (VP)Unbalanced Twist 1440° (VP)	a. From Front Pike to a single leg position (Bent Knee VP Fishtail etc.)while rotating 360. Front Pike to VP while rotating 180.	 a. Bent Knee Front Layout to Bent Knee Arch Position OR Front Layout to Split with a straight leg b. From Surface Arch Position to knight or split with a straight leg c. Bent Knee Surface Arch to Knight of the Knight of the Surface Arch to Knight (lifting the extending on the surface the bent leg)Fishtail e. to Knight (horizontal plane, along the surface) f. Fishtail to Knight 	connection (both legs must in VP "cone" area). May be fa anydirection.	legs must be May be facing
	T4 = 0.80					A4 = 0.45	F4 = 0.40	C4=0.50 C4+	C4+=0.60

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L5	Thrusts (T)	SPINS (S)		TWISTS incl.T	STS incl.Twirls/Swirls(R)	AIRBORNE WEIGHT (A)	FLEXIBILITY (F)	CONNECTIONS (C)Rotation	ation
	by Spin 360°b. Thrust	S5 = 1.95	Spin 1800º (<u>two</u> legs)	1R5 = 1.95	1 leg Twist 1800 $_{\circ}$	Front Pike to VP while rotating 360°	a. Knight to VP OR b. Knight to Fishtail through VPBent	vertical connection with one leg	one le
	followed by Twirt 180°	SC5 = 4.00	Combined 1800。 (<u>two legs</u>)	2R5 = 2.45 RU5 = 2.95	Twist 1800° (VP) Unbalanced Twist			in VP "cone" area (rotation of 180º + at maximum height). May	on of Jhtj. ∧
	c. Thrust with flexibility followed by Spin 180°	SCD5 = 4.05	Two-directionCo mbined 1800° (<u>two legs</u>)					הפרוסה. מופרוסה	
	d. Flying Fish Spin 180° or ThrustFisht ailHelicopter Spinning180 oDne leg								
	e. Thrust with Twirl 180° followed by Spin 360°								
	T5 = 0.90					A5 = 0.65	F5 = 0.50	C5 = 1.00 C5+ = 1.10	
σ	a. Thrust with b. flexibility followed by Spin as 0. Thrust with tollowed by Spin 360. C. Flying Fish ThrustFishtail Helicopter Spinning360.	S6 = 2.35 SC6 = 4.80 SCD6 = 4.85	Spin 2160° (<u>two</u> legs) Combined 2160° (<u>two legs</u>) Two-directionCo mbined 2160° (<u>two legs</u>)	1R6 = 2.35 2R6 = 2.95 RD6 = 3.35 RU6 = 3.55	1 leg Twist 2160° Twist 2160° (VP) Two-direction 2160° (VP) Unbalanced Twist 2160° (VP)	Sustained height with one leg or a combination of one or two legs lasting equal or more than 3 secondsor Isolated movements isolated movements fixerd single leg position (within VP definition of 0- 45 degrees) - 45 degrees) - 45 degrees) - 185ting 3 seconds or more with other (non-fixed) leg lasting 3 seconds or more OrA combination of the two techniques	 a. Cyclone 180° (BK Surface Arch Twirl 180° to a VP) b. Knight rotating in the 360° (twisting in the Knight Join to VP while rotating c. Knight Join to VP while rotating d. Flat sustained at the sustained at the surface 3seconds 	 a. Rotation vertical connection with two legs in VP cone, legs in VP cone, legs in VP cone, legs in VP way be facing any bar facing any bar facing any vertical connection with one leg (rotation of 360°+ at maximumheight). May be facing any direction. 	
	T6 = 1.10					AG = 1.15	F6 = 0.65	C6 = 1.25 C6+ = 1.35	

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7 Turnet formetely 51-235 Sign SECO.(tro) 207-345 Sign SECO.(tro) 207-345 Sign SECO.(tro) Sign SE	L	THRUSTS (T)	SPINS (S)		TWISTS incl.T	TWISTS incl.Twirls/Swirls(R)	AIRBORNE WEIGHT (A)	FLEXIBILITY (F)	CONNECTIONS (C)Rotatio	cation
Junit Totol Total of more than 3 seconds Total of more than 3 seconds Total of more than 3 seconds Total of more than 3 seconds Total of more than 3 seconds Total of more than 3 seconds Total of more than 3 seconds Traiton Traiton Second for the formation Traiton Traiton Traiton Traiton Second for the formation Traiton to Vent Period for the formation Second for for the formation<	~	Thrust followedby		Spin 2520°(two loce)	11	Twist 2520°(VP)	Sustained height in VP lasting		vertical connection with	
Tratto SE300, (VP) AZ 145 F7 = 0.5 Tratt vith Filterst vith					RU7 = 4.15	Unbalanced Twist	equal or more than 3 seconds		in VP "cone" area (rotat	ion of 360
Truettion Sealade vent Matter sealer Matter searer						2520°(VP)			• + at maximum height)). May be
Trrust with fieldbilty fieldbilty fieldbilty 2200 SB=315 Spin 28B0. (VP) Fieldbilty 2200 SPIN 28B0. (VP) Fieldbilty 2200 SB=315 Spin 28B0. (VP) Fieldbilty 7200 SB=315 Spin 28B0. (VP) Fieldbilty 7200 SB=315 Spin 28B0. (VP) Fieldbilty 7200 SB=335 Spin 28B0. (VP) Fieldbilty 7200 SB=335 Spin 28B0. (VP) Fieldbilty 7200 SB=335 Spin 28B0. (VP) Fieldbilty 7200 SB=335 Spin 3340. (VP) Fieldbilty 7200 SB=335 Spin 3240. (VP) Fieldbilty 7200 SB=335 Spin 3240. (VP) Fieldbilty 7200 SB=335 Spin 3240. (VP) Fieldbilty 7200 SB=335 Spin 3240. (VP) Fieldbilty 7200 SPIN 3240. (VP) 7200 SPIN		T7 = 1.50					A7=1.45	F7 = 0.75		0
Tollowed by Spin Tollowed by Spin 720 720 720 78	۵	Thrust with flexibility	S8 = 3.15	Spin 2880° (two legs)		Twist 2880°(VP)	Sustained height shown at least 3 seconds or more in			
TB = 170 a. TB = 170 a. Thrustio Thrustio Thrustio Thrustio Thrustio Thrustio Thrustio Sea 3.55 Spin 3240a Sea 3.55 Spin 3240a Sea 3.55 Spin 3240a Sea 3.55 Thrustio Sea 3.55 Spin 3240a Thist 3240a Choles Sea 3.55 Spin 3240a Thist 3240a Tay 240a Thist 3240a T		followed by Spin 720°)	RU8 = 4.75	Unbalanced Twist 2880°(VP)	VP performed in an unbalanced position			
TB=1706. Thrust to height of sign scale AB=165 Thrust to neight of sign scale Se=355 Spin 3240. AP=145 Twist 3240. Thrust to sign scale Se=355 Spin 3240. AP=145 Twist 3240. AP=145 Display to spin noded Se=355 Spin 3240. ZR9=445 Twist 3240. AP=165 Display to spin noded Sin noded Sin 3240. ZR9=445 Twist 3240. AP=165 Display to spin noded Sin noded Sin 3240. ZR9=445 Twist 3240. AP=165 Display to spin noded Sin noded Sin 3240. ZR9=445 Twist 3240. AP=165 Display to stable height stable								360°)		
Thrust to be solution as (waist) or higher or higher or higher or higher or higher or higher or higher solutionedby spin loads Spin 3240°. (VP) spin loads Twist 3240°. (VP) spin loads b. stan loads spin solutioned or more thrust spin solutioned spin solutioned by ston higher stationed by catchingdia stationed by spin solutioned by ston higher stationed by spin solutioned by spin solutioned		T8 = 1.70 a.					A8 = 1.65	F8 = 0.90		
B.5 (waist) contrigend soluwed by solume solumed by commendation in Second solumed so	ŋ	Thrust to height of	S9 = 3.55	Spin 3240° (two legs)		Twist 3240°(VP)		Surface Arch Position to VP rotating 180°		
Displanced Twist Spin 1080. Curbislanced Twist Spin 1080. Displanced Twist Spin 1080. Displanced Twist Twist 3600. Displanced Twist The krees or Twist 3600. Displanced Twist Twist 3600.		8.5 (waist)								
b. Spin Obsectory commonentrues or model of model in 1980. 32400.000 b. Sign Obsectory continuedox continuedoy continuedox continuedoy continuedoy continuedoy con		or higher			RU9 = 5.35	Unbalanced Twist				
D Continuest Statistion Continuestor continuestor continuestor continuestor continuestor continuestor continuestor v scoping- catching(clear v scoping- clear v scoping- v s		followed by Spin 1080°				3240°(VP)				
indiversion carchindedy carchindedy carchindedy carchindedy carchindedy carchindedy carchindedy carchindedy carchindedy carchinded carchind			÷							
In stability of the strategin demonstrated for its or tradied in the knees or higher Image: Image of the strategin demonstrated for its or tradient of the knees or higher Image: Image of the strategin demonstrated for its or tradient of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image: Image of the knees or higher Image of the knees or higher Image of the knees or higher Image of the knees or higher Image of t										
demonstrated for 10 v Prabove in a V Pabove higher higher T9=2.00 T9=2.00 T9=2.00 (two legs) (two legs) 2R10=4.95 (two legs) (two legs) 2R10=6.4.95 (two legs)		catching(clea ly stopping - stable height								
Tipe kresord higher Tipe kresord higher 19=2.00 19=2.00 S10=3.95 Spin 3600. (VP) RU10=5.95 Twist 3600. (VP) RU10=5.95 Unbalanced Twist 3600. (VP) RU10=5.95		for 1s or more	0							
T9=2.00 ZN0=3.95 ZN10=4.95 Twist 3600.(VP) 100=4.95 2R10=4.95 Twist 3600.(VP) 100=695) 2R10=5.95 3600.(VP)		the knees or higher								
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S10=3.95 Spin 3600° 2R10=4.95 Twist 3600°(VP) (two legs) RU10=5.95 Unbalanced Twist		T9 = 2.00						F9 = 1.00		
S10=3.95 Spin 3600° 2R10=4.95 Twist 3600°(VP) (two legs) RU10=5.95 Unbalanced Twist 3600°(VP) 3600°(VP)										
RU10 = 5.95 Unbalanced Iwist 3600°(VP)	6		S10 = 3.95	Spin 3600° (two leas)		Twist 3600°(VP)		Surface Arch Position		
)	RU10 = 5.95	Unbalanced I WIST		to VP rotating 360°		
						3000°(VH)		F10 = 1.30		



