CTIF

Competition Rules

International Traditional Fire Brigade Competitions

7th issue 2011

Approved by the CTIF Executive Committee on 31 October 2011

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COMPETITION RULES
for
TRADITIONAL INTERNATIONAL FIRE BRIGADE COMPETITIONS

7th issue 2011

Issued by the special section "Fire Brigades, Youth Fire Brigades and International Fire Brigade Competitions", adopted by the CTIF Executive Committee on 31 October 2011.

1. TRADITIONAL INTERNATIONAL FIRE BRIGADE COMPETITIONS

To increase the educational standard, especially to increase the friendly contact between the fire brigades of the member nations of the CTIF, International Fire Brigade Competitions (shortly called "competitions" in the following) are organised. All competitors (also the substitute man), judges and organisation personnel, who participate in an International Competition of the CTIF, receive the Badge of International Fire Brigade Competitions, which has exclusively been created for the event.

1.1 Appearance and bearing of the Badge of International Fire Brigade Competitions

The Badge of International Fire Brigade Competitions (shortly called "badge" in the following) is awarded by the president of the CTIF. It can be a putting badge or a transverse clasp. The Badge has to contain the following three items:

- the abbreviation "CTIF"
- the place of the event
- the year of the event

The bearing of the badge depends on the national customs.

1.2. Scoring Groups

The competition groups are divided into 3 scoring groups as follows:

- Scoring group "Voluntary Fire Brigades"
- Scoring group "Professional Fire Brigades"
- Scoring group "Female Teams"

1.3. Scoring Classes

The Traditional International Fire Brigade Competitions are organised in two scoring classes as follows:

- Class A without credit of age points
- Class B with credit of age points

In scoring class B competition groups may only participate, if each member (including the substitute man) is at least 30 years old. Decisive for the calculation of age points is the year of birth. It is pointed out that for competitors older than 65 years only 65 years will be counted. (Details – see section 9.1.2.)

1.4. Size of Competition Group

The size of competition groups is 10 competitors.

1.5. Age of Competitors

The age of competitors depends on the rules of the res. fire brigade federation, thus a competitor has to be at least 16 years old (year of birth).

1.6. Language of Orders and Commands

Orders and commands can be given in the form and in the language of the group's country. The combat order for the fire fighting attack will be ended by blowing the fire brigade signal whistle as executive command. The combat order can also be made via loudspeakers and for several groups simultaneously.
In this case the command will be made by the competition management (section 7.3.)

2. GENERAL RULES

2.1 Competition Disciplines

The competition groups have to participate in the following disciplines:

- Fire fighting attack (dry) and
- Obstacle Relay race

2.2. Conditions for admission

The competition group

- has to be registered according to the rules
- has to participate in Class A, if there is at least one group member who is younger than 30 years (year of birth)
- has to consist of members of the same fire brigade
- may, if all members are older than 30 years (year of birth), start in Class A (without credit of age points) or in Class B (with credit of age points)

The number of the admitted competition groups is laid down by the "Executive Council of the CTIF" in the Publication of the International Fire Brigade Competitions. Mixed groups (men and women) are possible; these start in the scoring groups "Voluntary Fire Brigades" or "Professional Fire Brigades".

2.3. Composition of a Competition Group and Marking of the Competitors

Each competition group has to participate in the respective disciplines with the following numbers of competitors:

Fire fighting attack (dry)	9 competitors
Obstacle relay race	8 competitors

Following registration at the Calculation Committee A, the competitor not participating in the fire fighting attack (substitute man) must not be changed any more. He must not enter the competition ground during the whole competition.
After the discipline "Fire Fighting Attack (dry)" the Group Commander will decide who of the competitors that took part in the fire fighting attack will not participate in the obstacle relay race. Following the registration for the obstacle relay race, this competitor has to leave the race track.

The competitors are marked with tactical signs. The tactical signs are carried on the chest and on the back. They are square and have a side length of about 30 cm. The tactical signs look as follows:

Post	Abbreviation	Tactical sign
Group Commander	GRCOM	black, full circle (Ø 20 cm) on white ground
Radio Operator	RO	black circle ring (Ø 20 cm; 3.5 cm wide) with black dot (Ø 5 cm) on white ground
Pump Operator	PO	black circle ring (Ø 20 cm; 3.5 cm wide) with two crossed, slanted stripes (wideness of the stripes 3.5 cm) on white ground
Attacking troop	ATR	
Leader of the attacking troop	ATRL (1)	black, half-full circle ring (Ø 20 cm) on red ground
Member of the attacking troop	ATRM (2)	black circle ring on red ground
Water troop:	WTR	
Leader of the water troop:	WTRL (3)	like ATRL, but blue ground
Member of the		

water troop	WTRM (4)	like ATRM, but blue ground
Hose troop	HTR	
Leader of the hose troop:	HTRL	like ATRL, but yellow ground
Member of the hose troop:	HTRM	like ATRM, but yellow ground

2.4 Equipment

All devices that are necessary for the realisation of the competitions are made available by the National Organisation Committee. A precise description of the devices has to be announced to the participating nations at least one year before the date of the competition.

2.4.1 Equipment for the Fire Fighting attack (dry)

For the fire fighting attack (dry) on every race track the following devices are needed:

1 portable pump with suction-entry A (4") and at least one pressure exit B (3") which is situated at the right side (seen in attack direction) and which is equipped with fixable porting bars. The coupling of the suction entry is to be mounted in a way, that – concerning couplings with projecting edges – the position of the projecting edges is identical for all portable pumps used in the competition, and that a projecting edge is situated at the uppermost position of the coupling or a maximum of 30 ° twisted to the left. The fixing screw valve at the pressure exit of the portable pump has to be fully open after 4 turns.
4 suction hoses A (4"), each 1.6 metres long, marked at both sides, 50 cm away from the coupling, all around the hose;
2 pressure hoses B (3") rolled twice (also designated as B-hose in the text), each 20 metres long, each with a hose carrier;
6 pressure hoses C (2") rolled twice (also designated as C-hose in the text), each 15 metres long, each with a hose carrier;
2 jet pipes C (2"), unlockable;
1 distributor (BCC or BCBC) with screw valves; *The projecting edges of the couplings have to be set in the same way as the projecting edges of the portable pump.* The fixing screw valves of the distributor have to be fully open after 4 turns.
1 suction head with bottom valve and separate possibility to fix the suction hose rope and the valve rope;
1 suction hose rope, maximum Ø 8 mm, 15 metres long, in the bag;
1 valve rope, maximum Ø 8 mm, 15 metres long, in the bag;
3 coupling keys, fitting the couplings of the suction hoses (country-specific designs are admissible);
1 bag with hose bandages;
2 hose holders;
1 red slate to mark the water supply point, at least 3 metres long and about 10 cm wide; The water supply point may also be marked by a marking on the grass carpet.
2 large buzzers at a height of 1 metre, connected to the electronic time-keeping (stop watch with display);
For protecting the lawn around the portable pump, an (artificial) grass carpet will be laid out in the area of placing the device and coupling the suction hose, with a size of about 9.0 x 4.0 metres. The position for laying out the equipment and lining-up the team has to be marked in an inerasable and water-proof manner on this carpet.
The dimensions of these markings can be found in the Annex.

The devices provided by the National Organisation Committee must, except for the formerly defined features, correspond to the national rules. Additionally attention is to be paid to the following criteria:

- If there is a European standard (EN) for a device, this standard must be complied with.
- Suction hoses as well as pressure hoses must be equipped with couplings which cannot be mixed up, that means that a pair of couplings consists of two equal parts. Storz-Couplings are recommended.

2.4.2 Competition Devices for the Obstacle Relay Race

For each race track the following devices are needed:

1 jet pipe C (2") – unlockable;
1 balance beam, 6 metres long, 20 cm wide, upper edge situated 60 cm above the ground;
1 barrier wall made of wood, 1.50 metres high, as wide as the whole race track; A suitable support must be provided.

1 crawling track, consisting of a 8 metres (± 0.1 metre) long tube made of wood, plastic or metal with smooth internal surface; The diameter of the tube has to be a minimum of 70 cm and a maximum of 80 cm. The side from which the competitor enters the tube has to be upholstered sufficiently to prevent injuries. The deepest point of the inner side of the tube must be situated a minimum of 15 cm and a maximum of 20 cm over the race track.

2.5. Suit and Personal Equipment

The competitors line up in their national fire brigade clothing with:

- fire fighting attack suit
- fire man's helmet
- fire brigade safety belt with karabiner or hook
- boots made of leather or plastic. Spikes, studs or metal pins at the soles are not allowed. The shoes must cover the ankles and be dark-coloured. Bright stripes are allowed.

Taking off pieces of clothing and/or equipment is neither allowed in the fire fighting attack, nor in the obstacle relay race.
All competitors must wear the prescribed equipment, including the fire brigade safety belt.
Axe and respiratory protection mask may not be worn.
The putting-up of the upper clothing or the trouser legs of the fire fighting and/or duty clothing is not allowed.
Competition groups not wearing clothing and/or equipment in accordance with the rules will be barred from the competitions.

3. THE JUDGES

The judges are nominated by the national fire brigade federations. The allocation of judges between the participating nations is defined by the CTIF Executive Committee. Only those judges who were trained accordingly by their national fire brigade federation may be nominated. If judge trainings are carried out by the CTIF, they have to participate. During their activity all judges wear national service clothing with cap.

3.1 The Competition Management

The Vice President who is in charge of the International Fire Brigade Competitions and the International Competition Leader belong to the International Organisation Committee of CTIF.

The International Competition Leader and the Competition Leader for the Traditional International Fire Brigade Competitions are appointed by the Delegates' Conference of CTIF.

The Competition Management of the Traditional International Fire Brigade Competitions consists of:

- the International Competition Leader of CTIF
- the International Competition Leader for the Traditional International Fire Brigade Competitions
- 2 members of the Committee "International Fire Brigade Competitions"
- the leader of the obstacle relay race
- the leader of calculation committee A
- the leader of calculation committee B

The Competition Management is responsible to the "International Organisation Committee" for:

- inspection of the competition place
- inspection of the relay race tracks
- inspection of the competition devices
- installation of the calculation committees
- organisation of judges´ meetings, where all judges have to be reminded of the most important competition rules; The obligation to evaluate objectively must be pointed out.
- allocation of the competitors to the individual competition tracks
- inspection of the infrastructure necessary for the competition (e.g. accommodation, catering etc.)

3.2 Judges for the Fire Fighting Attack

The number of judges for the fire fighting attack depends on the number of race tracks. The following judges are necessary for the fire fighting attack (dry) for each competition track:

- 1 Main judge (MJ)

- 1 judge 1 (J1)
- 1 judge 2 (J2)
- 1 judge 3 (J3)
- 1 judge 4 (J4)

The main judge and judge 2 have to be equipped with calibrated stopwatches. In case electronic time-keeping is used the judges 1 and 2 have to be equipped with calibrated manual stopwatches. For details see section 7.10.

The allocation of the judges to the available race tracks is defined by the International Competition Leader. All judges for the fire fighting attack have to inspect the devices as to their correct state on the race track, before they start their activity.

After this inspection the race track may only be entered by judges who are allocated to the res. race track as well as by the competition groups that are in competition.

3.3 Judges for the Obstacle Relay Race

The number of judges for the obstacle relay race depends on the number of race tracks.

The following number of judges for the obstacle relay race is needed:

- 1 leader of the relay race
- 1 starter
- 1 start-judge
- 2 judges (controlling)
- 1 judge (report of faults)

and for each track:

- 7 judges at the handover points (track judges)
- 3 judges, each of them situated at one obstacle
- 1 finish judge
- 1 time measurer
- 1 judge who notes the results in the valuation sheet

Every finish judge and every time measurer has to be equipped with a checked stopwatch. They are responsible for determining the running time.

3.4 The judges of the Calculation Committees

3.4.1 Calculation Committee A

.1. Calculation Committee A

The calculation committee A is situated in direct proximity of the competition site. It is composed of the following judges:

- the leader of calculation committee A
- 1 judge for every race track – fire fighting attack to do the registrations
- 2 judges for the controlling of clothing and personal equipment of the competitors
- 1 judge to call the groups for registration
- 1 judge to install the walks for the marching in

The judges of calculation committee A have to:

- check the conditions for the admission to the competitions
- check the list of participants with regard to the correct details
- check the clothing and personal equipment of the competitors

3.4.2 Calculation Committee B

The calculation committee B is situated near the competition site. It is composed of the following judges:

- the leader of calculation committee B

- 1 judge for each competition track – fire fighting attack
- 1 judge for the controlling of the calculations

If the calculation occurs by means of an Electronic Data Processing system, the competition leader may adjust the number of judges to the actual requirement.

The judges of calculation committee B have to:

- check the registered scorings
- calculate the reached number of points
- determine the achieved position
- support the International Competition Leader in the preparations for the handing over of prizes, documents and badges.

3.5 The reserve judges

The competition leader has to allocate an efficient number of reserve judges, who have to be trained like the other judges. These reserve judges are allocated in case of non-ability of an allocated judge onto his place. In the fire fighting attack (dry) MJ, J1, J2 and J3 mustn't evaluate groups from their own country. In this case they have to be substituted by a reserve judge who is allocated by the International Competition Leader.

3.6 Steward Service

The National Organisation Committee has to provide the International Competition Leader a Steward Service, consisting of one commander and about 40 stewards. They are directly subordinate to the International Competition Leader and are responsible for the order at the competition site. The steward service may also be used for other auxiliary services by the International Competition Leader.

3.7 Interpreters

The National Organisation Committee has to provide the International Competition Leader with a sufficient number of interpreters to fulfil his tasks. Loudspeaker announcements concerning the respective event on the competition site have to be made in the official languages of the CTIF (German, English and French) and if necessary also in the language of the respective country.

3.8 Marking of Judges and Stewards

The judges and stewards have to be labelled by armbands as follows:

International Competition Leader	white armband with three red stripes
Deputy of the International Competition Leader	white armband with two red stripes
Members of the International Competition Committee	white armband with one red stripe in the center
Main Judge, Leader of the obstacle relay race and Leader of the calculation committees	green armband with one red stripe in the centre
Judges of the fire fighting attack, of the obstacle relay race and of the calculation committees	green armband
Steward Service	Marking according to national habits

4. PLACE OF COMPETITION

4.1 Competition Tracks for the Fire Fighting Attack

For the fire fighting attack, a flat lawn in the scale of at least 70 x 10 metres is needed for each competition track. On each competition track there is a complete competition device. The competition track is measured from the "lath marking the water supply point" (section 2.4.1.). At the distance of three suction hoses (4,8m), measured from the outer edge of the water lath to the nozzle of the portable pump, the portable pump is installed. In addition, at the distance of

41.0 m to the outer edge of the water lath, an easily visible ground marking is to be provided, which runs across the race track (distribution line).

The number of competition tracks depends on the number of registered competition groups. For the marching up of the competition groups enough room must be available outside the competition tracks.

4.2 Competition tracks for the Obstacle Relay Race

The competition tracks for the obstacle relay race have to be placed on a flat area (e. g. running track in a stadium). At least two tracks have to be placed next to each other, so that at least two competition groups can run simultaneously. Each track has to be at least 1 metre wide. The tracks have to be divided by longitudinal stripes. The whole track of 400 m has to be divided into 8 stages of 50 metres each (point of handing-over). 5 metres before and 5 metres behind the point of handing-over a line has to be drawn perpendicularly to the running track (room of handing-over). The bends have to be considered at the determination of the stages. In case of a bend the stage is measured 20 cm beside the inner edge of the running track. In the 3rd section of the track there is the beam, in the 7th section there is the obstacle wall and in the 8th section there is the crawling tube. For women's teams the obstacle wall in section 7 is replaced by a beam in the 4th section.
In front of the starting line sufficient space has to be demarcated (starting area), where the competition groups may be checked by judges before participating in the obstacle relay race.

5. PREPARATION OF THE COMPETITION

5.1 Application

The application forms are provided for the National Fire Brigade Federations by the International Organisation Committee on time. These forms have to be filled in correctly and completely. They have to be sent to the International Organisation Committee until the indicated date and are used by the National Organisation Committee for the preparation of the competition.

5.2 The Final Registration

The forms for the final registration are provided to the National Fire Brigade Federations by the International Organisation Committee. These forms have to be filled in correctly and completely. They have to be sent to the International Organisation Committee until the indicated deadline for applications. Competition groups, whose registration forms are only submitted after the deadline for applications, and who can therefore not be included in the competition plan, have no right to be admitted for the competition. The same rule applies to the application of judges. In the final registration the names of all the competitors must be shown. However, changes are possible until the day of competition. Such changes have to be announced to the calculation committee A, upon registration there.

5.3 Participation Fee

In coordination and cooperation with the National Organisation Committee, CTIF collects a contribution toward accommodation, catering and organisation. The contribution for accommodation and catering will be available to the National Organisation Committee, the organisational contribution will be available to CTIF.

5.4 The Competition Plans

Upon receipt of all final registrations, the necessary plans for trainings, competitions and judges are created. These plans are transmitted in due time to the competition groups and judges by the National Fire Brigade Federation.

5.5 Training

Each group has the opportunity to train with the used devices on the competition site before the competition. The detailed training times will be determined in a training plan. The training time for the fire fighting attack shall be at least 30 minutes for each team on the competition site and for the obstacle relay race at least 10 minutes on the race track.

6. BEGINNING OF THE COMPETITION

6.1 The Opening of the Competition

The International Organisation Committee issues precise instructions for the opening of the competition. All judges and competitors take part in the opening ceremony of the competition.

The teams march onto the competition place as instructed by the International Competition Leader. The competition will be opened under the auspices of the patron of the event. After the competition flag has been hoisted and the teams have marched by, the International Fire Brigade Competitions will be held.

6.2 Registration at Calculation Committee A

The competition groups have to appear before the calculation committee A in due time, as indicated in the competition plan. When called, they report for the handing over and inspection of the participant lists. Groups that want to participate in score class B have to prove the birth dates of the competitors by an official identity card.

One judge checks the participants for correct clothing and personal equipment. The participants have to wear the tactical signs already on their back and chest. Following the checking of the participants' list the group commander receives the envelope with the valuation forms. The competition groups line up per round and march on call onto the assigned competition tracks for the fire fighting attack.

7. THE FIRE FIGHTING ATTACK (dry)

7.1 Lining-up of the Competition Group; Putting-on the Competition Device

The called competition groups are lead to the competition tracks by their group commander in closed formation. After their arrival, the group commander hands over the envelope with the valuation documents to judge 4. Then the competition group prepares the device for the fire fighting attack (section 2.4.1) under the control of a judge. The putting-on of the equipment as well as the line-up of the competition group is done according to defined standards and available ground markings.

On the lawn or grass carpet white ground markings with the width of 5 cm have to be applied in an inerasable and waterproof manner for putting on the competition equipment and for the line-up of the competition group.
The distributor, the pressure hoses, the jet pipes, the hose holders and the bag containing the hose bandages will be placed in the center of the marking. To place the pressure hoses B outside the center will only be tolerated, if none of the pressure hoses B will reach beyond the width of the portable pump.
The suction hoses have to be placed longitudinal in the center of the marking, whereas the couplings pointing towards the water supply point are aligned with the suction port of the portable pump.
The portable pump is to be put down in a way that the coupling of the suction port is aligned with the marking.
The suction head, the adjoining coupling keys and the linen bag will be placed at the marking line, so that this line will indicate the distance to the portable pump, if seen in the direction of the attack.
The marking dimensions may be derived from fig. 1.

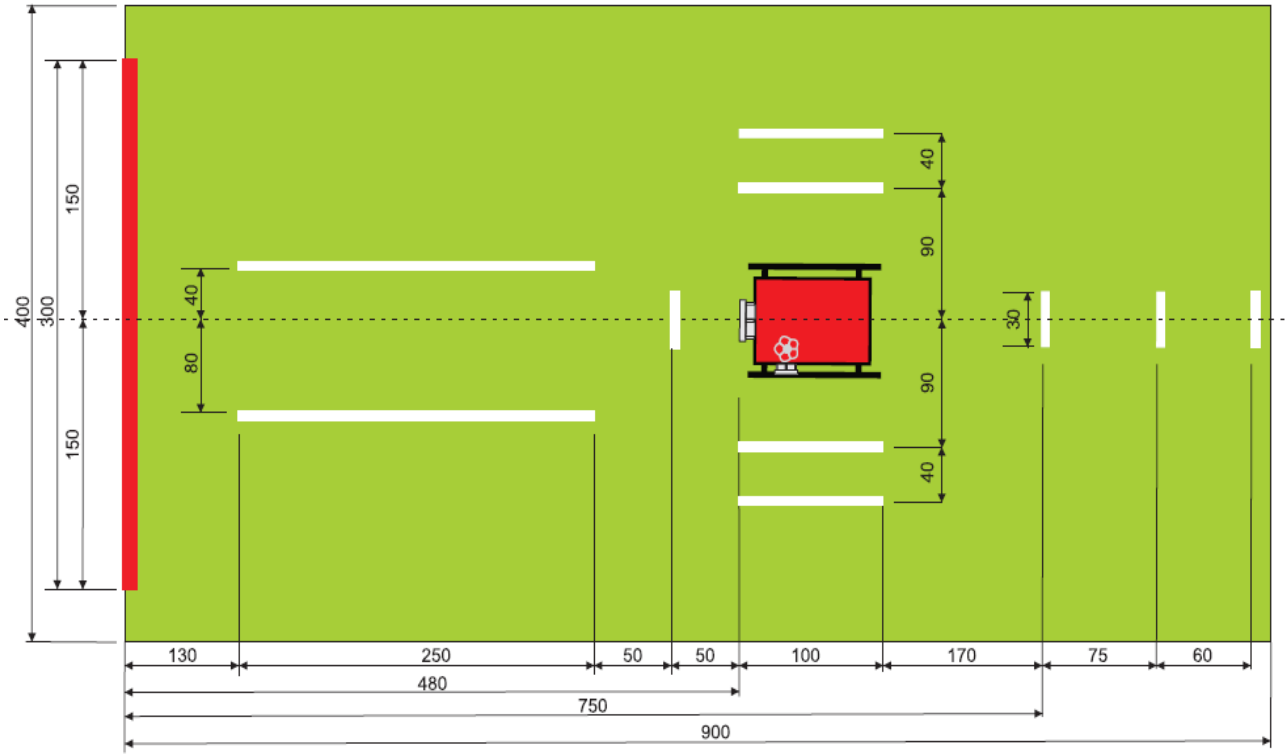

Fig.1: Ground markings for placing the competition equipment

The suction head has to be laid down in a way, that the distance between the suction port of the portable pump and the coupling of the suction head is at least 50 cm. Suction hose rope and valve rope lie, seen in attack direction, on the left beside the suction head. They must neither be put on top of each nor put upright. Two coupling keys lie on the right beside the suction head; they must not lie on top of each other, either. The third coupling key lies below the suction port of the portable pump. The suction hoses have to be laid down in a way, that in each case two suction hoses lie on both sides of the portable pump, parallel to their longitudinal axis. The couplings that point at the water supply point have to be aligned with the suction port of the portable pump. The distance of each of the suction hoses to the portable pump has to be 90 cm, if seen from the centre of the portable pump to the centre of the suction hose. The distance between the suction hose centre has to be 40 cm each. All suction hoses have to be laid down in a way that the space between the hoses will not exceed the width of the respective hose. They have to be set up symmetrically to the longitudinal axis of the portable pump, with both couplings pointing to the front. It has to be noted that the placing of pressure hoses may start from the outer line of the portable pump – to the right of the direction of attack – , which means that the pressure hoses may not reach beyond the width of the portable pump.
If a knot is made into the hose carrier, the group will be asked to remove the knot. If a hose carrier should be cut off by the group, this group will be disqualified.
The remaining equipment is to be placed as indicated.

Fig. 2a: Placing the equipment

Fig.2b: Placing the equipment

The competition group may decide itself to which direction the right front bar of the portable pump is turned. The bar may point straight ahead or to the side to the right.

At the same time judge 4 checks if the pressure hoses are rolled correctly, if the devices are set according to the rules, if the valves are closed and if there are no markers – neither on the device nor on the competition track. A pressure hose is rolled and set correctly if it is rolled twice, if both couplings point straight ahead and the hose is not folded back. Also the inner part of the rolled hose may not be placed in hollow spaces.

This figure shows: Double-rolled pressure hose

When the device is set, the judge orders the group commander to let the competition group come “To the device!”. Then the group commander orders his competition group “To the device!” The competition group lines up in pairs. In this line-up they wait for the main judge.

As described in the Competition Rules J4 has to inspect the correct positioning of the equipment, therefore he also needs to check if the equipment has been laid out correctly on the markings. Until the reporting of the GRCOM to the main judge, J4 has to monitor the line-up of the group, afterwards this task is taken over by J3.

Line-up of Competition Groups

If the group now comes “to the device!“, the line-up has to be such that the GRCOM, PO, ATRL, WTRL and HTRL touch the demarcation line with their shoe tips. RO, ATRM, WTRM and HTRM will line up so that their heels touch this line. Additionally, it has to be considered that the GRCOM and HTR will not stand aside, i.e. beside the extended demarcation line; their outer shoe tips have to touch the demarcation line. The RO and the troop members have to stand directly behind the PO and their troop leaders.
The shoe tips and heels must be on the line – the upper body may be twisted.
Without the permission by Judge 4 the equipment may now not be touched anymore. From the approach of the main judge to the competition group until the termination of the fire-fighting exercise and the inspection by the judges, the competitors may not speak any more (otherwise “Talking during work“ , fig. 3a,b).

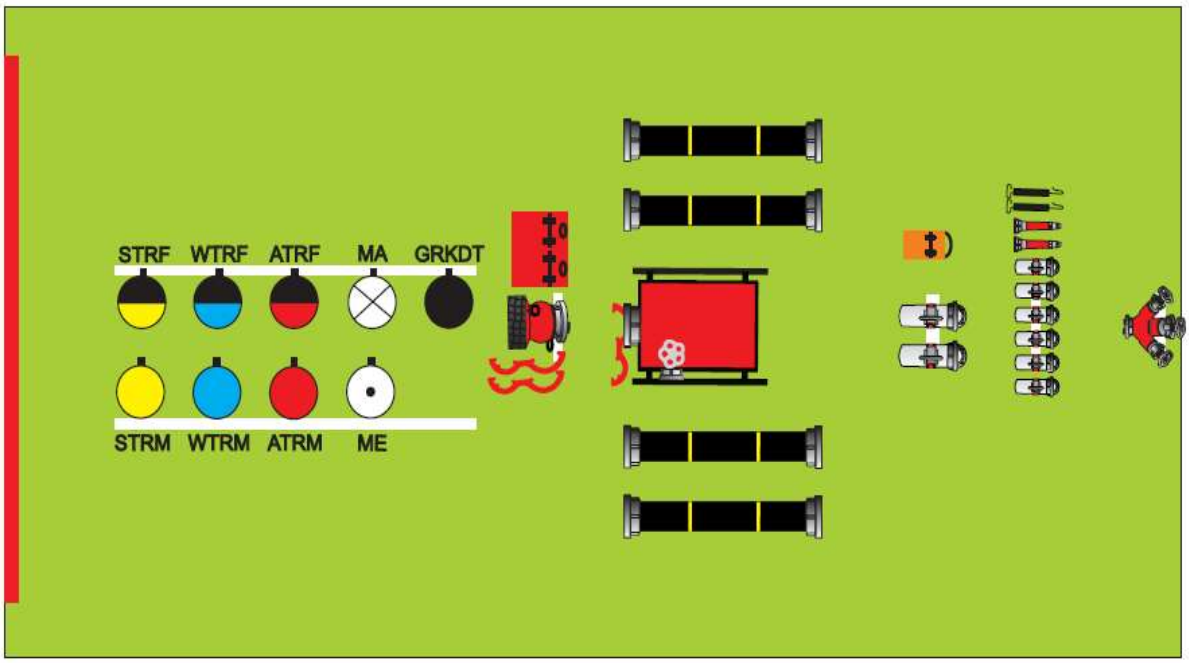

Abb.2c: Placing the equipment and line-up of the competition group.

Fig.3a: Line-up of the Competition Group

Fig.3b: Line-up of the Competition Group

7.2 Report to the Main Judge

When the judges have stepped-forward to the competition group, the group commander reports to the main judge (in country-specific form) "Competition group….. lined up!" and steps back into the group by order of the main judge. Unless the group stands correctly the main judge must not allow the start.

7.3 Start

The main judge asks the group commander, if the device is okay. If confirmed, the main judge gives the order "Start!". Simultaneously the main judge and judge 2 raise their hands with the stopwatch.
If electronic time-keeping is used, the main judge will place his hand, stretched out and even, directly on the start buzzer. At the same moment, Judge 1 and 2 will raise their hands with the manual stopwatches.

The group commander now steps 4 steps forward, turns to the left to the group and gives his order (the order can be given in the language of the country of the competition group, the content has to be translated but not word by word), while none of the competitors is allowed to change their position:

"Fire object straight ahead, water supply point is the creek, distributor after two B-lengths, attacking troop lays the supply pipe. With two C-lengths each, first and second pipe (ahead) – whistle!" (The execution command "ahead" is given by blowing the fire brigade signal whistle).

As soon as a member or the competition group starts (also in case of a false start), the main judge and judge 2 lower their arms and simultaneously press their stopwatches. So the time-taking for the fire fighting attack starts.

The competition management may define that all groups which participate in one round start simultaneously (parallel competition). In this case the order to go into action is given over the loudspeakers by a member of the competition management in the language of the organising country. Using a tape or a CD is recommended. The order is ended by blowing the whistle or shooting the starting pistol.

Until the start the competitors stand in calm position. For the line-up at the start line, all the members of the fire brigade must stand in a calm position, with both their feet on the demarcation line on the ground, but without transgressing this line. After the group commander has moved to the front of the group, none of the competitors must change their position in any way. If one or several of the competitors do not adhere to this rule, in combination with touching the demarcation line, the competition group will be reprimanded once by the main judge.
In the case of non-adherence, this will be scored as "false start" (5 penalty points). A parallel start will be immediately scored as a penalty, without issuing a reprimand first.

An early start will be scored as a "false start", regardless if this false start has been caused by one or several competitors. It is also regarded a false start if a member of the competition group moves one foot from the demarcation line, possibly to assume a staggered line-up, before the whistle or the shot occurs, this shall be evaluated as a false start. Also the shifting of a foot to the back (i.e. the lifting and putting down) is considered a step in this context.

The pump operator orders "4 suckers!" and moves to the suction port of the portable pump.

The attack troop starts laying out the supply pipe. The water troop and the hose troop move to supply pipes. The group commander and the radio operator move to the site of the distributor. It is not counted as a mistake, if the same should move forwards slowly or stop in between. However, if the group commander or radio operator stop around the portable pump and watch the "coupling of the suction hoses" this is considered "faulty work". However, "faulty work" may be judged only once, even if this mistake should be made by the group commander and the radio operator

During the fire fighting attack the ground behind the red lath res. the thought prolongation of the red lath (water supply point) may not be touched by any of the competitors with a whole part of his body (other-wise: "faulty work" - penalty). However, it is not regarded as a fault if e. g. one foot stands at the same time on the red lath and on the ground behind it. Foot or hand must completely touch the ground behind the red lath and he ground at the same time, in order to be judged as faulty work.
It is different for the competition devices which may not touch the ground behind the red lath, apart from the completed suction hose pipe. Only touching the red lath is no fault. (It will not be considered faulty, if the rope bag rests on the water lath without touching the ground behind the red lath).

7.4 Setting-up of a Suction Hose Pipe

7.4.1 Laying out the Suction Hoses

The pump operator takes the two rope bags, the two coupling keys that lie beside the suction head and the suction head, and moves to the place where the suction head is to be coupled to the suction hose pipe. The pump operator must not take the devices to the coupling place in two cycles (otherwise: "faulty work"). If the suction head drops to the ground, while the operator carries the equipment to the other position this is rated with "faulty work". If another device falls to the ground, it is not regarded a fault.

The pump operator may lay down or hand over the two rope bags, the two coupling keys and the suction head. In any case, he must hand over the suction head – even if he has laid it down (section 7.4.2) (otherwise: "faulty work").

The water troop takes up the two suction hoses that lie right beside the portable pump (seen in attack direction). The leader of the water troop takes the coupling that are nearest to the water supply point, the member of the water troop takes the coupling that are placed in the direction of the fire object. It is the decision of the member of the water troop if he runs outside the hoses or between them. On picking up the suction hoses both competitors are situated in direction of the water supply point, whereas it is not of significance if they stand with one or both of their feet between or outside of the suction hoses. They now carry the two suction hoses diagonally to the right, the leader of

the water troop has to go in front. They lay down one suction hose in front of the suction hose that has been left right beside the portable pump (line of vision – water supply point). Then they lay the other suction hose in front of the one they have just laid down.

If on this occasion the WTR lifts the suction hoses over the portable pump, i.e. the WTRL moves to the place, where the suction hoses are laid down, on the water side, and the WTRM in front of the portable pump, this is not judged as a mistake. Furthermore it is left to the WTR, if they first lay down the hose carried on the right or the one carried on the left. If the WTRL hands over the suction hose to be laid down as the last one, directly to the HTRL, without laying it down first, this is judged as "faulty work".

Fig. 4a: Carrying of the suction hoses by the WTR and laying-out the suction hose by the HTR

Fig. 4b: Laying-out the suction hose by the HTR

The member of the hose troop takes the front coupling of the suction hose lying in attack direction left beside the portable pump, the leader of the hose troop takes the rear coupling of this suction hose. They lay them down in front of the suction hose that remained outside left.

If the suction hoses are laid down in a different way than described above, this is rated with “faulty work” in each case. This means that the suction hoses have to be laid out in the order described above, but this does not refer to the fact that a competitor kneels down when depositing a suction hose, etc.
Kneeling down on the suction hose is permitted.

The suction hoses must not be dropped during the laying out (otherwise: “Dropping of couplings”).

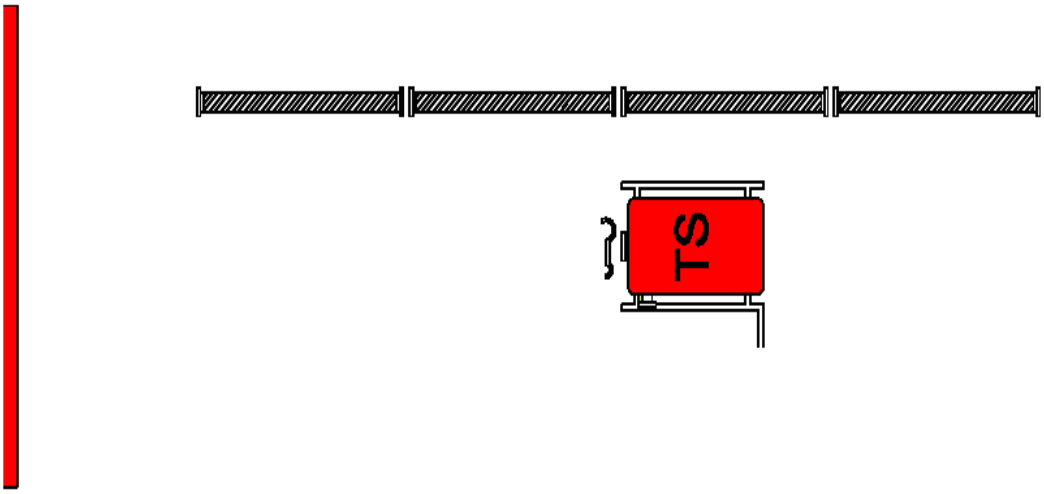

Fig. 4c: Correct layout of suction hoses. Schematic drawing

7.4.2 Coupling of Suction Hoses

When all suction hoses are laid down, the leader of the hose troop and the member of the hose troop move to the suction hose, which lies nearer to the water supply point. Both stand in straddle over this suction hose, with line of vision to the water supply point. The leader of the hose troop stands nearer to the water supply point, the member of the hose troop stands behind him. Now they lift the suction hose (Fig. 5)

Abb. 5: Lifting of the first suction hose for coupling the suction head

During that, the leader of the water troop takes the suction head from the pump operator (throwing the suction head is seen as “faulty work”) and takes position opposite the leader of the hose troop. The leader of the water troop holds the suction head, the leader of the hose troop holds the suction hose – both in a height that the couplings can be moved to each other approximately horizontally.

The member of the water troop has meanwhile taken the two rope bags from the pump operator (the pump operator can also drop them or lay them down), has opened them and laid them down ready to hand. It is up to the pump operator, if he wants to re-position the rope bags following the member of the water troop. If another person than the pump operator or the member of the water troop arranges the rope bags, this is "faulty work". The member of the water troop has to touch both rope bags with his hand(s), otherwise this will be "faulty work".

The leader of the water troop and the leader of the hose troop couple the suction hose and suction head by hand. Now the pump operator gives the leader of the water troop and the leader of the hose troop one coupling key each. It is his decision how and from which side he hands them over.
If at the handing over by the pump operator to the leader of the water troop and the leader of the hose troop, the coupling keys are already placed on the suction head and coupling by the PO, this is not seen as a mistake. If the suction head and coupling of the suction hose are connected manually and thereafter fixed with the coupling key on the ground, this is seen as the mistake "faulty work".
The leader of the water troop and the leader of the hose troop tighten the couplings with the coupling keys and keep the keys.
If the HTRM presses the coupling of the first suction hose held by him to the ground, while coupling the suction head, in order to achieve higher stability of the suction hose during the coupling process, this is to be judged as "faulty work", since one of the couplings touches the ground.

Then the water troop and the hose troop lay down the suction hose with the coupled suction head. The suction hose pipe may not be dropped (otherwise: "Dropping of couplings").
If the hose troop member (HTRM) jams the suction hose lying on the floor with one foot, while coupling the suction hoses, and the HTRM lays down the already coupled suction hose, with the projecting edges of the coupling already interlinking, this is not a mistake.
If the couplings are laid out so closely to each other that the parts already interlink, this is not seen as a coupling process. However, if a coupling is turned one bit, this is already seen as a coupling process, i.e. the coupling process starts with turning a part of the coupling pair.
If such coupling process is performed by a competitor not planned for this, this is regarded as "faulty work".
After the suction head has been coupled to the first suction hose and put down, the leader of the hose troop and the member of the hose troop make a turnaround to the backward left(seen in the direction of attack) to the next suction head, whereby they step over the suction hose to be coupled and straddle it (Fig 6a, b, c).

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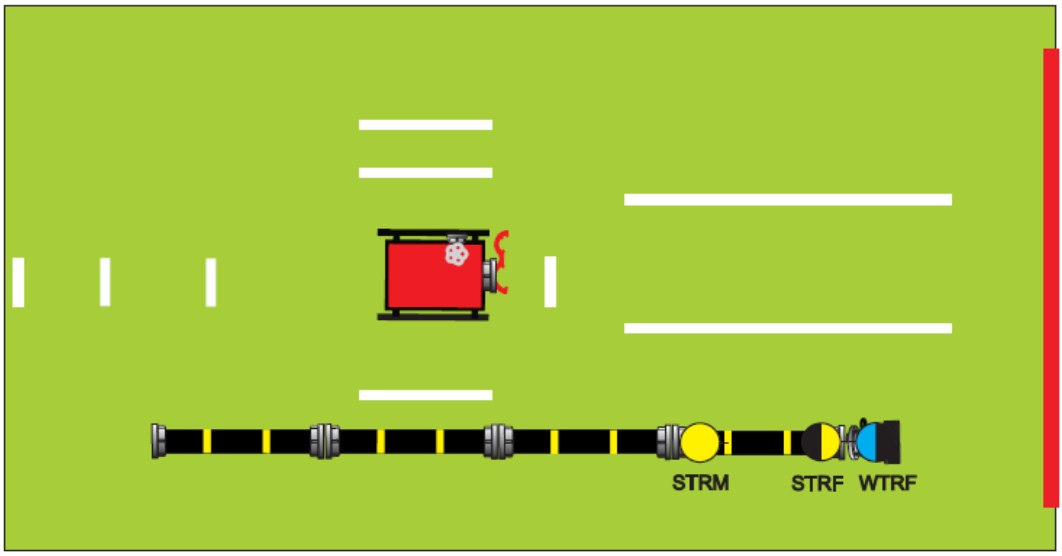


Fig. 6a: Start of the coupling process

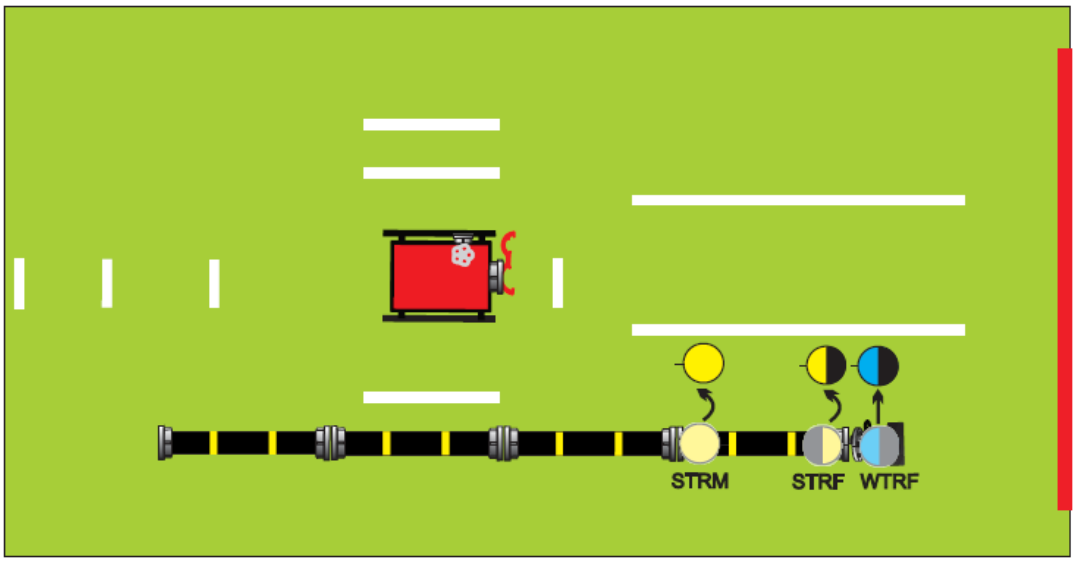


Fig. 6b: turnaround to the backward left

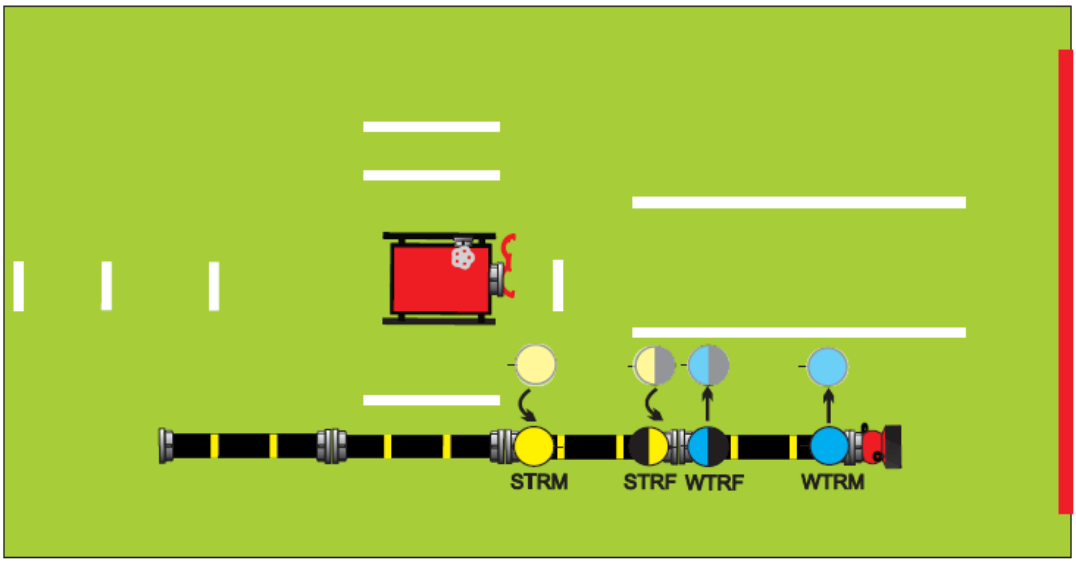


Fig. 6c: The hose troop makes a turnaround on the left foot into the left backward direction

At the same time the leader of the water troop moves one step to the right and also stands right beside the suction hose pipe. This clearly indicates that the leader of the water troop (WTRL) has to touch the ground to the right of the suction hose with his left foot at least once while moving on to the next coupling, otherwise it is considered "faulty work".
The leader of the water troop moves to the right side of the suction hose pipe to the next pair of couplings that are to be coupled. The member of the water troop moves to the coupled pair of couplings. They now move one step to the left, in straddle over the suction hose pipe.

If one or more competitors don't move from suction hose to suction hose according to the rules, only one "faulty work" is rated – regardless how often and how many competitors made this fault.

The member of the water troop may, coming from behind, step directly over the suction head to lift the suction head pipe and to couple the second pair of couplings. He needn't step over the suction hose pipe from the right side.

Both troops lift the suction hoses and act analogously as in coupling the suction head.

During the coupling of the suction hoses water troop and hose troop have to stand in straddle above the suction hoses. However, it is no fault if the member of the hose troops stands a little behind the hose to be coupled, when he lifts the suction hose. However he may not touch the following suction hose, which still lies on the ground, with his hand (otherwise: "faulty work").

It is considered “Wrong work”, if the HTRM touches the next suction hose or its coupling when laying down the suction hose. Therefore it also counts as a fault, if he corrects the position of the coupling of the lying suction hose (“faulty work”).
It is no fault, if he corrects the position of the coupling of the lifted suction hose during the coupling process with his right or left hand. If the member of the hose troop pulls up the suction hose, which lies on the ground, once or several times, “faulty work” may only be rated once.

The couplings of the suction hoses to be coupled may not touch the ground during the coupling process (otherwise: “faulty work”). Also if this fault is made several times, “faulty work” may only be rated once. The coupling process is the turning of the projecting edges. The pushing together of suction hoses lying on the ground is not considered a mistake. (Fig. 7a, b).

It is no fault, if the leader of the water troop and the leader of the hose troop place the coupling keys together already before the putting the two couplings. (Fig. 8a, b).

Fig. 7a: Coupling of the suction hoses by water troop and hose troop

Fig. 7b Coupling of the suction hoses by water troop and hose troop

Fig.8a: Putting on the coupling keys and coupling the suction hoses

Fig.8b: Putting on the coupling keys and coupling the suction hoses

The coupling of the other pairs of couplings occurs analogously. However, also the member of the water troop has to step right beside the suction hose pipe after each coupling process now.

In order to guarantee a regular working of water troops and hose troops during the coupling, the pump operator may give the order “Up!” or “Down!” or analogous order in the language of the respective country to lift or lay down the suction hoses which have to be coupled or have just been coupled. It’s the decision of the pump operator where he stands during the coupling of the suction hoses.
During the coupling of the suction hoses, but also during the coupling of the suction hoses to the portable pump (section 7.4.4) you have to take care that the coupling key encloses the coupling of the suction hose and that nobody knocks on the coupling. Otherwise: “faulty work”.
Since several groups will apply their keys during the coupling process it may happen that the coupling key will not fully enclose the metal part of the coupling; this is permitted to the extent that the coupling key will not lie completely flat on the suction hose. If the coupling lies completely flat on top of the suction hose rubber part, this is considered a mistake and will be deemed to be “faulty work.”
If coupling keys that are cranked on both sides are used, i.e. adjusted for A couplings on one side and for B couplings on the other side, care must be taken that the right side of the key is applied, when connecting the coupling hoses, but also when coupling the suction hose line to the portable pump, otherwise this is judged as “faulty work”.

"Faulty work" may be judged only once when working at the suction hose line, even if this mistake occurs frequently. The mistake must be confirmed by the main judge as well as judge 3. If this mistake was made and also the pump operator (PO) applies the coupling key incorrectly afterwards, or only knocks on the coupling, this is to be judged as "faulty work" once again.
After all the suction hoses have been coupled, the leader of the water troop gives his coupling key to the member of the hose troop. The coupling key may not be thrown (otherwise: "faulty work").
The WTRL gives the key to the HTRM. If during this handing over the key drops to the ground this is considered "faulty work". If the coupling key is picked up again by the leader of the water troop and handed over to the member of the hose troop, this is no mistake. If the coupling key drops to the ground before or after the handover, this is not a mistake.
If the coupling key is not handed over, but thrown, and drops to the ground, this is also seen as "faulty work". If the coupling key is thrown and drops to the ground this is judged as "faulty work" only once. If the WTRL deposits the key, and the key is picked up by the HTRM this is not considered handing over the key and therefore also as "faulty work". The coupling key may be handed over anytime between the connection of the last coupling of the suction hose and the final line-up, i.e. it does not need to be handed over immediately after completing the coupling works at the suction hose (Fig. 9).
The handing over may also be done after the suction hose has been deposited. The leader of the hose troop will keep his coupling key.

Fig. 9: Handing over the coupling key from the water troop leader to the member of the hose troop

If the leader of the hose troop or the member of the hose troop lays down the coupling key near the portable pump without taking it with them to the final line-up, this is rated with "faulty work". If they lose it on their way and it remains there, this means "remaining or lost device".

7.4.3 Applying the ropes

Now the pump operator gives the command: "Apply the ropes!". The leader of the hose troop moves to the suction head and takes the rope bag with the valve rope. The member of the water troop moves to the left side of the suction hose pipe and lifts the second suction hose moderately in its middle. The pump operator takes the fourth suction hose near the last coupling and lifts it moderately. The leader of the water troop takes the rope bag with the suction hose rope and hooks the carbine into the provided ring at the suction head. He may not hook it into the ring provided for the valve rope (otherwise: "ineffectively fastened suction hose rope").
Standing at the right side of the suction hose pipe, he now pulls the suction hose rope out of the bag and sets a whole snare at all pairs of couplings around the water-side suction hose in a way, that the suction hose pipe forms a slight wave rope. The knot of the snare may not lie on top of the couplings and it may not be positioned more than 50 cm (see marker) in front of the coupling either (fig. 10).

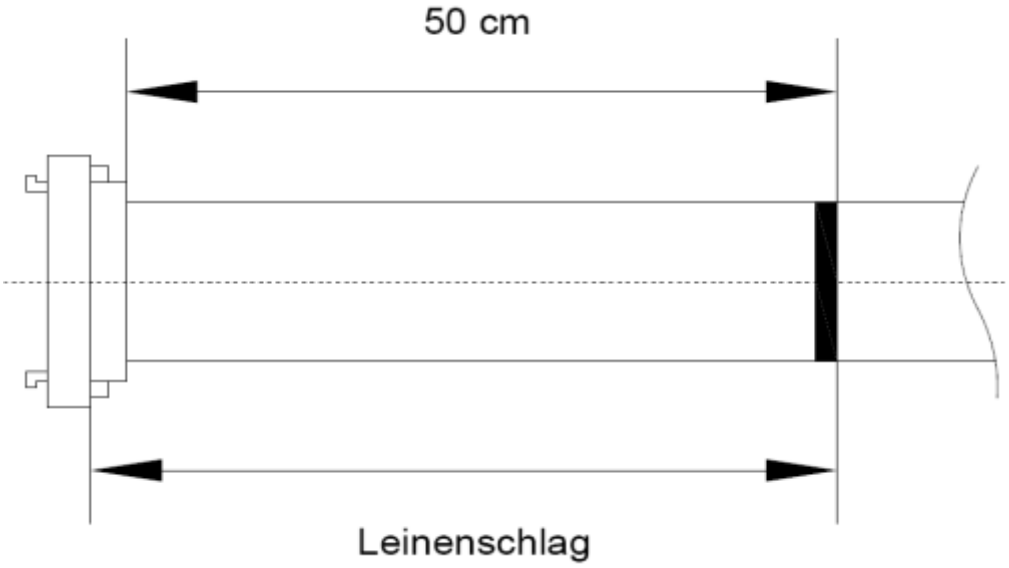


Fig. 10: Marking the suction hose and schematic drawing of the area for the snare

If the suction hose rope is not placed in the described way, “ineffectively attached suction hose rope” is rated. This fault may only be rated once, also if two or more faults are made during the placement of the suction hose rope.
The leader of the hose troop meanwhile hooks the carbine of the valve rope into the ring of the evacuation valve (otherwise: “ineffectively or wrongly laid out valve rope”). He may thereby, also during the fixing of the suction hose rope at the suction head by the leader of the hose troop, lift the suction head. The leader of the hose troop may therefore lay down the coupling key for a short while.

Fig. 11: Lifting of the coupled suction hose pipe, attaching of the suction hose and valve rope

During the process of attaching the ropes, the suction head must not move towards the water supply point. The suction pipe may be put upright, and during this, the suction head may turn around its axis. The pump operator may step over the suction pipe to straddle it, only after the suction hose rope has been readily put onto the suction hose pipe and the pump operator has issued the command "suction hose to water". Up to that point, the last coupling of the completely coupled suction hose may NOT be positioned at the same height and parallel to the suction port nozzle of the portable pump. In addition, it has to be noted that the pump operator and the member of the water troop have to stand over the suction pipe, touching the ground with both their feet, while coupling the suction hose.

If the valve rope is hooked into the ring provided for the suction hose rope, because the suction hose rope has already been placed incorrectly in the ring for the valve rope, or if the suction hose rope is hooked into the ring for the valve rope, because the valve rope has been placed incorrectly in the ring provided for the suction hose rope, this shall be judged as "ineffectively attached suction hose rope" as well as "ineffectively or wrongly laid out valve rope", because it is certainly possible to hook two lines into one ring.

7.4.4 Taking the Suction Hose Pipe to Water

After the leader of the of the water troop has installed the snare in front of the coupling between the third and fourth suction hose, the pump operator commands, "suction pipe to water!". If he gives this command earlier, "faulty work" will be rated. Before this order, the suction hose pipe must not be moved in direction of the water supply point (otherwise: "faulty work"). The pump operator remains near the last coupling of the fourth suction hose. The member of the water troop takes the coupling between second a third suction hose. It is no fault, if the member of the water troop and the member of the hose troop touch the couplings of the suction hose pipe before the leader of the water troop has set the last snares with the suction hose rope around the suction hose pipe and before the pump operator has given the command "suction pipe to water!". The leader of the hose troop takes the suction head.
Upon the command "suction pipe to water", it is sufficient, if the HTRL has placed only one hand at the metal part of the coupling or the suction head (fig. 12).
Now the pump operator, member of the water troop and the hose troop carry the coupled suction hose pipe to the suction port of the portable pump res. to the water supply point (red lath).

Fig.12: Carrying the suction hose pipe towards the water supply point

This means upon the command "suction hose pipe to water" HTRL, HTRM and WTRL must take the concerned coupling at least with one hand, because the suction hose pipe can only be carried, if it is taken or at least touched with the hand(s).
It is regarded as „faulty work", if the HTRM leaves the coupling between the first and second suction pipe before the suction pipe hose has been deposited, and does not touch it with one hand.
The water troop member and the hose troop will now deposit the suction hose pipe. The leader of the hose troop puts the end of the suction hose pipe beyond the red lath. The suction head must lie completely beyond the red lath (otherwise "faulty work"). Before that the valve rope must have been fastened. The fastening of the valve rope at

the suction head, already lying “in the water”, is judged as “faulty work”. The bag for the valve rope may not come to lie on the ground behind the red lath (otherwise “faulty work”).
The suction head is laid out correctly, if it lies beyond the red lath completely, i.e. including the coupling. The coupling of the first suction hose is not part of the suction head, and therefore does not have to lie completely beyond the red lath. (fig. 13).

Fig. 13: Placing the suction head beyond the red lath

Since it is seen as a mistake, if the valve rope is installed at a suction head “in water” the competition rules provide for the installation of the valve rope at the suction head also after the command “suction hose pipe to water!”. This means if the command “suction hose pipe to water!” is given even before the HTRL has installed the valve rope at the suction head, he may wait with laying out the suction head until he has installed the valve rope. If the HTRL places the suction head behind the red line, even before he has installed the valve rope, lifts it up again or lifts it out of the water for hooking the valve rope correctly into the lifted suction head, the mistake “faulty work” remains.

Fig. 14: Coupling the suction hose pipe to the portable pump

The pump operator steps over the suction hose pipe – which he need not lay down - in straddle. The member of the water troop steps over the suction hose pipe behind the pump operator (touching the ground with both feet).
Both lift the suction hose pipe moderately. The pump operator couples the suction hose pipe to the sucking-carbine of the portable pump, using the third coupling key which lies under the suction nozzle of the portable pump. Before this, the coupling key must not be picked up. The coupling key may be placed from above, but also from below or on the side.
When coupling the suction hose pipe to the portable pipe, the PO shall apply the key to the coupling of the suction hose. Special care must be taken to place the key in its correct form and not to knock on the coupling, otherwise this will be judged as “faulty work”. Fig. 14

Meanwhile, the leader of the water troop installs the suction hose rope at the right front bar of the portable pump. The suction hose rope has to be lead under the attached B-hose of the conveyor (otherwise: “faulty work”). The judges may check the firmness of the knot at the bar by pulling the suction hose rope in direction of the water supply point. If the knot opens, “ineffectively attached suction hose rope” is rated. If also tension of the suction hose rope of the suction hose pipe has to be tested, the knot may only be checked after this test.

The leader of the water troop lays down the rope bag with the pulled out valve rope at the left side of the portable pump, that means between the suction nozzle and the motor terminal (without carrier bar). If only a minor part of the rope bag protrudes over this demarcation line, this is judged as the mistake “ineffectively or wrongly laid out valve rope “.
The valve rope may not be thrown out (otherwise: “ineffectively or wrongly laid out valve rope”). The fault “ineffectively or wrongly laid out valve rope” may only be rated once, also if several faults are made during attaching and laying out of the valve rope.

Fig. 15.: Position of the rope bag with the valve rope

After the pump operator has coupled the suction hose pipe to the portable pump and has placed the coupling key, he reports “sucked up!”. The suction hose pipe must not be installed at the right front bar of the portable pump, the valve rope must not be pulled out yet. If the suction head doesn’t lie “in water” yet, this is not rated. This means a mistake may not be rated as long as the command “sucked up!” is given, and before the suction head has finally been placed in the water.

Before “sucked up!” no competitor of the water troop or the hose troop – except for the leader of the water troops during fastening the suction hose rope at the bar of the portable pump – may enter the area in front of the portable pump and do his work (otherwise: “run away of WTR or HTR before “sucked up!”).

After “sucked up!” the pump operator may keep the coupling key or lay it down. He may also leave it on the coupling. After “sucked up!” the pump operator only may tighten the coupling, however he must not apply the key again (otherwise: “faulty work”).

Now the suction hose pipe must be in a position that the suction hose rope is fully stretched. If not, the judges have to stretch the suction hose pipe in direction of the water supply point. However, it may only be stretched in prolongation of the imaginary line between the suction nozzle of the portable pump and the suction head. If the suction hose rope is tightened after this stretching, no fault may be rated. If it is, however, still slack, this is rated with “ineffectively attached suction hose rope”. If a pair of couplings of the suction hose pipe opens during the stretching, this may not be rated as “open pair of couplings”. In this case, the tension of the suction hose rope cannot be rated anymore (Fig. 16).

Fig. 16: Attaching the suction hose rope to the portable pump

7.4.5 Renewing of the couplings

If a pair of couplings opens before "sucked up!", it is the decision of the pump operator, whether he orders the water troop and the hose troop to the open pair of couplings by the command "to the suction pipe!" and lets them couple the couplings once again according to the rules, or whether he lets the work go on. The water troop and the hose troop may also couple once again on their own. Coupling once again has to be done by the same competitors and in the same formation and same way as during the first coupling. If not, "open pair of couplings" is rated, even if now coupled correctly. Each renewing of the couplings, even after "sucked up!", also by the pump operator, is rated with "open pair of couplings".

7.5 Laying out the conveyor

After the attacking command the leader of the attacking troop and the member of the attacking troop take a B-hose each.
The member of the attacking troop opens the hose carrier of his B-hose and couples it to the right pressure exit of the portable pump. (Fig. 17) The leader of the attacking troop now takes the B-hose to be laid out at its free coupling half and pulls it in direction of the fire object, until it's completely stretched.

Fig.17: Coupling and laying out of the first B-hose

The member of the attacking troop pays attention that the B-hose is not seriously bended after the portable pump. A bend in the first B-hose of the conveyor at the portable pump means that the B-hose does not touch the ground within the area of the portable pump (without bar). A sharp bend in the B-hose at the pressure exit of the portable pump is rated with “badly laid-out pressure hoses”. If the member of the attacking troop pulls the laid out B-hose back again to correct a bend, this is rated with “dragging laid-out hoses”.
See also item 9.2.7 „dragging laid-out hoses“:
“Dragging laid-out hoses” is rated, if a hose which is already completely laid out is pulled across the floor lengthways.
This clearly indicates that the mistake “dragging laid-out hoses” is only given, if the pressure hose is moved over its full length, i.e. including the coupling at the other side of the hose.
If the first B-hose does not touch the ground within the area of the portable pump and is consequently pulled back by the member of the attacking group, in order to correct a bend, without making the coupling with the second B hose move, this will not be rated a mistake, since the hose has not been moved over its entire length.
If the member of the attacking group (ATRM) notices the bend of the first B-hose only when running back after pulling out the bend of the first B hose within the area of the portable pump and pulls it now back at the height of the portable pump, so that it now lies on the ground within the area of the portable pump and the second coupling of this hose has not moved in the process, this, as described above, shall not be considered a mistake. Furthermore, the Competition Rules do not contain a reference as to when the bend in the first B-hose may be corrected.
Should, however, someone else than the ATRM pull back the B-hose, this will be rated with "faulty work" and is to be monitored by judge J1 and J2.
As soon as the member of the attacking troop has coupled the B-hose to the portable pump, he may move to the leader of the attacking troop. If the leader of the attacking troop has pulled out the first B-hose he opens the hose carrier of the second B-hose.
The member of the attacking troop takes one end of the B-hose opened by the leader of the attacking troop and pulls it until beyond the marking (41 m) (Fig. 18). If the second B hose has been pulled out, before the coupling is laid down and if the ATRM consequently pulls it over the marking, so the coupling may now be laid down beyond the marking, this shall be rated as “dragging laid-out hoses” because the coupling at the other end of the hose (coupling pair with the first B hose) is moved at the same time.
If a B hose is not pulled out completely and therefore the middle part of this hose stays in circle or spiral form (snail), as described in item 7.6 “Laying out the First Fire Fighting Pipe”, this shall be rated as “badly laid-out pressure hose”, even if the second coupling of the second B hose lies beyond the 41 m marking.
If the leader of the attacking group (ATRL) opens the hose carrier of the second B hose, even before completely pulling out the first B hose, and the ATRM already pulls out the second B hose, whereby at the same time the first B hose is pulled out by the ATRL as provided for in the rules, and thereafter the ATRL couples the two B hoses together, this shall be rated as “faulty work” since the ATRL may only open the hose carrier of the second B hose after pulling out the first B hose.
If the conveyor is not pulled beyond the marker (41 meters) – the metal piece of the coupling of the B-hose has (seen in attack direction) to lie beyond the marker – “badly laid-out pressure hoses” is rated once.

Fig. 18 Correct position of the coupling of the second B-hose

However, it does not say if this rating applies to the first or second B hose. Therefore this provision in principle applies to the entire conveyor.

In the following situation it was however necessary to explain the competition rules in more detail:

The conveyor is not laid out completely, so the distributor lies before the 41 meter-mark. The first B hose leading away from the portable pump is bent at the exit from the B coupling, has a spin and is laid out in a shortened manner. The second B hose is pulled out completely, however it does not reach the 41-meter-mark, because the first B hose was laid out in a shortened manner.

For evaluating this situation, also item 9.2.6 “Badly laid-out Pressure Hoses” of the Competition Rules shall apply.

Among others, it says there:
Badly laid-out pressure hoses are rated, if:
- a hose has a spin (twisted parallel to its axis more than 360 °)
- the B-hose coupled to the portable pump has a sharp bend
- the coupling of the second B-hose of the conveyor does not lie completely behind the marking (41 m).

“Badly laid-out pressure hoses” may only be rated once per hose, also if several faults have been made. Each hose has to be rated separately.
In case the conveyor does not end beyond the 41-meter mark and several mistakes occur at the conveyor, this leads to the interpretation that “badly laid-out pressure hoses” can be rated for a maximum of two times. In this context it does not matter, how many mistakes are found in the entire conveyor.
However, if the judges determine that the conveyor, despite the award of 10 penalty points, has been laid out considerably shortened, with the intention to gain time, the main judge will ask the International Competition Leader for disqualification of the group. – see item 9.6.
In the meantime the leader of the attacking troop couples the second B-hose to the already laid-out first B-hose. Both B-hoses may be coupled together by the leader of the attacking troop before the arrival of the member of the attacking troop.
It is not necessary that the member of the attacking troop res. the leader of the attacking troop steps onto the B-hose when pulling it. The pressure hoses need not be pulled, they may also be rolled out. During the laying-out of the conveyor no coupling of a pressure hose may fall to the ground (otherwise: “dropping of a coupling”). The laid-out pressure hoses must not have a spin (otherwise: “badly laid-out pressure hoses”). It is regarded as a spin, if a pressure hose is twisted in its longitudinal direction more than 360 °.

7.6 Laying out the first Fire Fighting Pipe

After laying out the conveyor, the leader of the attacking troop equips himself with:

- the distributor
- one C-hose
- one C-jet pipe and
- one hose-carrier,

the member of the attacking troop equips himself with two C-hoses.

Both competitors (ATRL and ATRM) move to the free end of the conveyor again, where the leader of the attacking troop lays down the distributor.
If the ATRL lays down the distributor in the direction of the B coupling so that the projecting edges already interlink, this is not a mistake, even if the ATRL stands on the B hose of the conveyor when doing so, in order to make the coupling look towards him. However, the coupling must afterwards be turned by the ATRM (coupling process – for explanations see 7.4.2 paragraph five).
If the distributor or jet pipe drops during the fire-fighting attack, this is rated with “faulty work” for each individual case.

The member of the attacking troop lays a C-hose as reserve right beside the distributor. If the reserve C-hose is thrown down, this will be rated with “dropping of a coupling”. It is irrelevant, if the rolled C-hose is laying or standing and in which direction the couplings show. The reserve C-hose may not lay further than 2 metres apart from the distributor (otherwise: “incorrectly placed reserve hoses”) (Fig. 19).

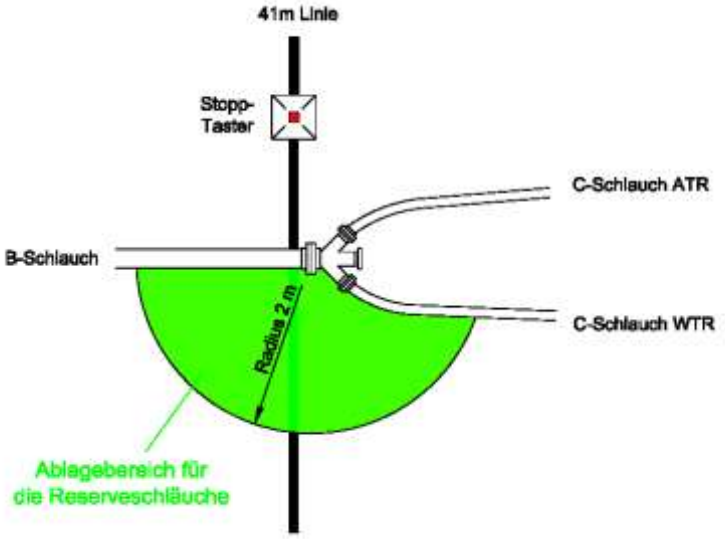


Fig.19 Correct placement of the reserve hoses

The reserve hoses are also laid down wrongly, if only one part of them res. only one part of a coupling comes to lie on a pressure hose of the fire fighting pipe or on the conveyor.
If a reserve C hose or a part thereof and/or part of its couplings lies on a pressure hose of the fire fighting pipe or the conveyor this will be rated as “incorrectly placed reserve hoses”. The hose carrier is not considered in this context.
Should, however, the first C hose of the (second) fire fighting pipe lie on and not under a reserve hose, this is not considered a mistake, since the C hose has been deposited after the laying down of the reserve C hose.
However if a reserve hose lies completely within both fire fighting pipes (C hoses), this shall be rated with “incorrectly placed reserve hoses” for each incorrectly placed hose, even if the incorrect hose still lies to the right of the distributor.

The member of the attacking troop now opens the hose carrier of the other C-hose, which is taken at the free coupling half by the leader of the attacking troop and has to be pulled out in attack direction. The C-hose is to be pulled out in a way that it is not laid out more than 2 metres shortened in his whole length, otherwise this is rated with “badly laid-out pressure hose”. It is no fault if during the laying out of the reserve hose beside the distributor the first C-hose of the fire fighting pipe has already been opened by the member of the attacking troops.

The member of the attacking troop couples the distributor to the B-conveyor and the C-hose to the left pressure exit of the distributor, whereby the sequence is his decision (Fig. 20).

Fig. 20 Coupling the C- and B-hose to the distributor

After having pulled out the first C-hose, the leader of the attack troop opens the hose carrier of the C-hose he has carried, couples a coupling to the laid-out C-hose, couples the other coupling to the C jet pipe and waits for the arrival of the member of the attacking troop. It is the decision of the leader of the attacking troop whether he first couples both C-hoses together or whether he first connects the C- jet pipe to the C-hose. Coupling both C-hoses together or coupling the C- jet pipe and the C-hose together while pulling out the first C-hose is not allowed ("faulty work").
It is not considered a mistake, if the hose carrier is only opened after the ATRL has coupled the two C hoses together or has already coupled the jet pipe to the C hose.

The leader of the attack troop may not unwind the C-hose to its full length, otherwise this will be considered "faulty work".
The member of the attacking troop unwinds the C-hose that has been opened by the leader of the attacking troop and checks out that the fire fighting pipe is positioned correctly. At this point, the C-hose may only be rolled out to the left, right or back, but not to the front, in the direction of the object of the attack.
If the ATRL has not picked up the hose carrier of the second C-hose before unwinding it, and it is wound up together with the hose, this is not considered a mistake, if the ATRL picks up the hose carrier.
However, if the ATRM brings the hose carrier to the ATRL and hands it over to him, this will be rated as "faulty work". The same applies to all pressure hoses within the conveyor and both fire fighting pipes.
If the ATRM (in the same way as the WTRM) lifts up the coupling pair between the two hoses when unwinding the second C-hose, in order to be able to better unwind the hose, and does not lay it down on the same position afterwards, but lays it down again so it is positioned towards the direction of attack, to make up for a possible shortening of the first C-hose, this will be judged as "faulty work" because the first C-hose is to be pulled out by the ATRL and not by the ATRM.
At the time of unwinding the C-hose the C-jet pipe need not yet be coupled to the C-hose; also the two C-hoses need not be coupled yet. The second C-hose has to be taken by the member of the attacking troops with at least one hand. The unwinding only with a leg is not allowed (otherwise: "faulty work"). The second C-hose is laid out correctly, when the end of the hose winding is not arranged in a circle or in a half (spiral) (at least 360 °) and the hose does not cling to itself. However, if it does, this is rated with "badly laid-out pressure hoses".
If the second C-hose is only piled up and therefore lies on top of itself several times, or if the double-rolled C-hose is twisted around itself and forms a so called "corkscrew", this is also "badly laid-out pressure hose" (Fig. 21a, b).

Fig. 21a Badly laid-out pressure hose „piled-up“

Fig. 21b Badly laid-out pressure hose „snail“

We speak of a “corkscrew” if the inside of the double-rolled hose has been pulled out and the hose lies on top of itself and is at the same time turned for more than 360° around its longitudinal axis.
Concerning the dropping of couplings and concerning a spin in a pressure hose, the same rules are valid as for laying out of the conveyor.
As soon as the leader of the attacking troop has coupled both C-hoses together and has coupled the C-jet pipe to the second C-hose, he gives the order “first pipe - water march!” back to the competitor at the distributor.
It does not say in the rules that when doing this, the ATRL has to look back to the distributor. He also does not need to raise a hand, but he may do so. The competitor at the distributor (radio operator or HTRL) shall raise a hand to indicate that he has heard the command. The same shall apply to the WTRL, but also for the competitor at the distributor (RO or HTRL), when giving the command “water march!” to the pump operator (PO).
The member of the attacking troop now steps right beside the leader of the attacking troop. Both look in direction of attack and take the jet pipe res. the terminal of the fire fighting pipe with both hands.
.

The leader of the attacking troop can also give the command “First pipe – water march!” when the member of the attack troop is not at his side yet. The fire fighting pipe, however, must be completely installed at this point.
Immediately after the order “First pipe – water march!” the leader of the attack troop and the member of the attack troop must stand in their final line-up. They may not change their line-up anymore as soon as time has been stopped, and must not pick up left devices anymore (incorrect final line-up); otherwise the original fault (e.g. “left or lost equipment) remains valid.

7.7 Occupying the Distributor and Monitoring the Hoses

After the attack command the group commander and the radio operator have to move to the location of the distributor immediately. Until the leader of the hose troops arrives, the radio operator may occupy the distributor. In this case he has to perform the HTRL’s work (otherwise: “faulty work”).
The leader of the hose troop (res. the radio operator) occupies the distributor by stepping directly in front of the distributor, straddling the conveyor. Only from this point of time the distributor is deemed to be occupied (Fig. 22).

Fig. 22: Occupation of the distributor by the HTRL

If the distributor is connected to the conveyor and the distributor is occupied, the leader of the hose troop (res. the radio operator) gives the pump operator the command “water march!”. If he gives the command “Water march!” before the conveyor has been connected to the distributor, this is rated with “faulty work!”. By lifting his hand over head-height the pump operator gives a sign that he has heard the command and then opens the pressure exit of the portable pump.
The leader of the hose troop (res. the radio operator) may not hold the distributor out to the member of the attacking troop res. the member of the water troop to couple it to the pressure hoses (otherwise: “faulty work”).

After the command “First pipe – water march!” by the leader of the attacking troop, the leader of the hose troop (res. the radio operator) lifts one hand above head-height to signal that he understood the command and opens the left pressure exit of the distributor.
If the ATRL (or in the same way the WTRL) gives the command “First pipe – water march!” without the distributor being occupied, – the HTRL (and or the RO) does not stand over the conveyor in straddle, directly in front of the distributor – this will be judged as “faulty work”, even if he has heard the command before occupying the distributor and possibly also confirmed it.
If the ATRL (WTRL) notices that he has given the command “water march!” too soon and repeats it after the distributor has been filled correctly, this will not be considered a mistake.
If the HTRL and/or the RO gives the command “water – march!” to the PO, without standing over the conveyor, this will be rated as “faulty work”.

If a pressure exit is opened before the command “water march!”, this is rated with “faulty work”. If a pressure exit is opened without command, this is rated with “command wrong or not understandable” and not additionally with “faulty work”.
If the leader of the attack troop gives the command “first pipe – water march!” before the leader of the hose troop has given the command “water march!” to the pump operator, the leader of the hose troop confirms the order by lifting his hand above head-height. Fig. 23
It is the decision of the leader of the hose troop (res. the radio operator) if he first gives the command “water march!” to the pump operator or if he first opens the left pressure exit of the distributor. As a signal, that the command “water march!” has been received, the pump operator res. the leader of the hose troops lifts his hand.
Should one of them lift his hand before this command and only lowers it afterwards, this is “faulty work”. Pump operator and leader of the hose troop (radio operator) must lift their hands over head-height.

The pressure exits of the portable pump and of the distributor have to be opened completely. It is no fault, if the valve is turned back not more than half a turn (otherwise: “pressure exits not opened according to regulations”).

The member of the hose troop picks up the bag with the hose bandages and moves to the coupling between the two B-hoses of the conveyor. There he takes his stand looking in the direction of attack, to the left or right or on top of the coupling between the two B-hoses, equipped with the bag containing the hose bandages and with a coupling key.

Fig. 23: Command „first (second) pipe – water march“ HTRL lifting his hand to signal that he has received the command

If the distributor has been occupied by the radio operator, he leaves the distributor as soon as the leader of the hose troop arrives. If the command of the leader of the attacking troops “first pipe – water march!” comes while the leader of the hose troop takes over his tasks at the distributor, and if then radio operator and leader of the hose troop lift one hand simultaneously, this is not rated as a fault.

7.8 Laying out the second Fire Fighting Pipe

After the report “Sucked up!” by the pump operator, the leader of the water troop equips himself with:

- one C-hose
- one C-jet pipe
- one hose carrier,

the member of the water troop with 2 C-hoses.

Both move to the distributor and lay out the second fire fighting pipe in the same way as the attack troop has laid out the first fire fighting pipe. The second fire fighting pipe is connected to the right pressure exit of the distributor.
If a C hose that is carried by the WTRM is already taken by the WTRL when running to the distributor, this will not be seen as a mistake, as long as the hose carrier is not opened before arrival at the distributor.
If the attack troop has - by error - connected their fire fighting pipe to the right pressure exit and the member of the water troop therefore connects the first C-hose of his fire fighting pipe to the left pressure exit, "faulty work" is only rated once. If the member of the water troop does not apply his C-hose to the distributor by the reason mentioned above, additionally to the fault "faulty work" also an "open pair of couplings" is rated. These rules are valid analogously, if the member of the water troops has connected equipment wrongly before the member of the attack troop.
The command to open the second pressure exit is "Second pipe – water march!". The leader of the hose troop lifts his hand over head-height as a signal that he understood the command, then opens the right pressure exit of the distributor and stands up.
If the commands "First pipe – water march!" and "Second pipe – water march!" are received at the same time, the leader of the hose troop has to lift his hand twice over head-height.
After the leader of the hose troop has opened both pressure exits at the distributor, he has to remain in the final line-up according to section 7.9.

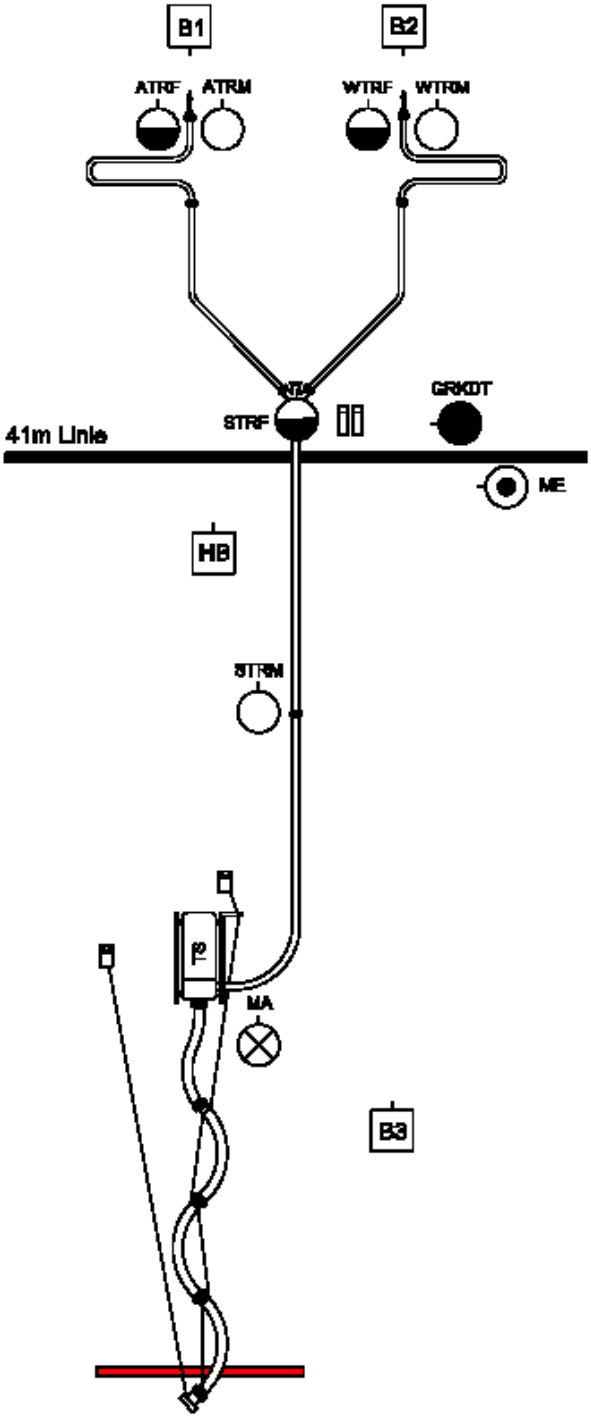


Fig. 24: Final line-up of the whole team

7.9 Final Line-up (Fig. 24)

After the fire fighting attack the competitors have to assume the following positions:

Group Commander	On a level with the distributor, about 4 steps right beside it, looking in the direction of the distributor;

Radio operator	One step behind and one step left beside the group commander, looking in the direction of the distributor;
Pump operator	Right beside the suction hose pipe res. the portable pump, looking in attack direction, equipped with a coupling key, which may also lie in front or beside him, res. on or under the suction nozzle of the portable pump. If the PO stands with one or both feet on the suction hose rope at the final line-up, this will not be seen as a mistake. However, if the PO stands on the B hose of the conveyor, this will be rated as "incorrect final line-up";
Leader of the attack troop	Left beside the pipe res. the second C-hose of the first fire fighting pipe, holding the jet pipe res. the second C-hose with both hands, looking in attack direction, equipped with two hose carriers and one hose fastener;
Member of the attack troop	Right beside the jet pipe res. the second C-hose of the first fire fighting pipe, holding the pipe res. the second C-hose with both hands, with both feet in front of the coupled C-coupling pair and in front of both C-hoses (reserve hose),looking in attack direction, equipped with two hose carriers;
Leader of the water troop	Left beside the pipe res. the second C-hose of the second fire fighting pipe, holding the jet pipe res. the C-hose with both hands; looking in attack direction, equipped with one hose carrier and one hose fastener.
Member of the water troop	Right beside the pipe res. the second C-hose of the second fire fighting pipe, holding the jet pipe res. the C-hose with both hands, looking in attack direction, equipped with one hose carrier.

Attack troop and water troop

At the final line-up of ATR or WTR it does not matter, in which sequence the jet pipe and/or the C hose are held by the troop leader or troop man.
If attack troop or water troop or even a member of any troop is looking backwards or face each other during the final line-up, this shall be rated once as "incorrect final line-up", no matter if this mistake is made by the ATRL (WTRL) or ATRM (WTRM) or both of them.
ATR and WTR have assumed the final line-up position correctly, if they look towards the direction of attack.

If the hose carrier or hose fastener are hooked on the pipe this is considered "incorrect final line-up", since the competition rules stipulate that the ATR and WTR must carry them. It also does not matter, if one or two devices are hooked on the jet pipe. Fixing a hose fastener or hose carrier between hand and pipe is permitted.
Hose carrier and/or hose fastener must not be taken into the mouth either. If the ATRL and/or WTRL have a hose carrier and/or hose fastener in the mouth when the command "first / second pipe – water march!" is given, this is considered a mistake according to 9.2.11 "Command Wrong or Not Understandable".
If this is done by the ATRM and/or WTRM, this will be rated as "incorrect final line-up". For each person "incorrect final line-up" can be judged only once, even if several mistakes occur at the same time.
Since the jet pipe has to point in the direction of attack, the second C-hose can only be pulled out to the left, right or backwards, however not to the front, in the direction of attack.
Since both troop members have to stand to the left or right of the second C-hose, i.e. the hose should lead backwards between the two, no hose may lead from one of the two troop members to the left or right or to the front. Furthermore, the coupling pair connecting the two C hoses may not lie between or in front of the two troop members. In all such cases this shall be judged as "incorrect line-up" (once).

Also the coupling pair which connects the two C-hoses may not lie between or in front of the two troops. In all these cases this will be judged as “incorrect line-up” (once) (Fig. 24a, b).

Fig. 24a: Final line-up of attack troop and water troop

Fig. 24b: Final line-up of attack troop and water troop

Leader of the hose troop	Straddled above the second B-hose of the conveyor, directly behind the distributor, looking into attack direction, equipped with one coupling key;
Member of the hose troop	Left or right or above the coupling between both B-hoses of the conveyor, looking in attack direction, equipped with the bag of the hose fasteners and one coupling key; If the HTRM stands on the B hose of the conveyor during the final line-up, this is judged as “incorrect final line-up”.

As soon as the group has assumed its final line-up, none of the competitors may stand on a pressure hose.
If one competitor does not stand as described above, “incorrect final line-up” is rated. If the leader of the attack troop and member of the attack troop or the leader of the water troop and member of the water troop stand opposing to the given regulations , “incorrect final line-up” is only rated once;

If one competitor misses something of the prescribed equipment, “left or lost device” is rated per incident. If the leader of the hose troop or the member of the hose troop have put down the coupling key at the portable pump and it is left there, “faulty work” is rated for each incident.

7.10 Tasks of the Judges for the Fire Fighting Attack

For the acceptance of the report of the group commander to the main judge, he moves to the group commander and stops two steps in front of him. Left beside the main judge stands judge 2, left beside him judge 1, right beside the main judge stands judge 3.
For better surveillance of the work of the group, especially the WTR, judge 3 may stand even before the start right beside the portable pump (seen from the direction of attack). When standing there, care must be taken not to obstruct the work of the group.

After the group commander (tower speaker) has finished the command to attack by whistling (shot on the starting pistol) or as soon the first competitor starts, main judge and judge 2 lower their arms and press the stopwatches. Time taking for the fire fighting attack starts.

After the start the main judge and judge 3 move to the portable pump and monitor the laying out and coupling of the suction hose pipe.

Judge 1 and judge 2 monitor the laying out of the conveyor, the work of the radio operator and the behaviour of the group commander as well as the laying out of the two fire fighting pipes.

After completion of the suction hose pipe the main judge moves straight ahead with the water troop and lines up approximately 10 m in front of the distributor, looking in the direction of the distributor. Judge 1 and judge 2 have to stand in between the attack group and the water troop, or beside the troops. Judge 3 lines up near the pump operator.

Directly before the leader of the hose troop opens the second pressure exit of the distributor, main judge and judge 2 lift their arms with the stopwatches. If main judge and judge 2 notice that the competition group has finished their work and stand still, they lower their arms and do the timing. This means the timing is to commence as soon as all competitors are standing still. Should a C-hose of the fighting pipe still be rolling out, judges are not to wait until this is finished to commence timing.

Judge 1, judge 2 and judge 3 take care that none of the competitors changes the position of the devices after time keeping. If the position of a competition device is still changed, the original situation is rated (illustration 15).

The main judge now calls the group commander and shows him the measured time. If the times done by the main judge and judge 2 don’t correspond, the arithmetical means of both times is rated. If one of the two stopwatches has failed or if one time is obviously wrong, the time measured with the other stop watch is valid. The time is entered into the evaluation form in tenths of a second. If the stopwatch shows hundredths of a second, at first the arithmetical means of both times is rated and then it is rounded up (5-9) or rounded off (1-4).

The main judge, judge 1 and judge 2 check the correct line-up of the competitors, their correct equipment and if the competition devices are laid out correctly. If pressure hoses have to be checked for a spin on order of the main judge, they have to make sure that during the check a possible spin is not transmitted to the next hose. During all these tests the group commander goes along with the main judge.

The suction hose pipe is checked by the main judge and judge 3. After the suction hose pipe has been checked, the main judge orders the group commander to let the competition group line up “to the device!”. With this command the ban on speaking for the competition group ends. The main judge may also order that the jet pipes are taken back as far as the distributor or the coupling between the two B-hoses of the conveyor.

The group commander passes this order (these orders) on to the competition group. The competition group lays down the device as ordered and comes “to the device!”.

Meanwhile the judges evaluate completely impartially. Judge 1 and judge 2 report faults with laying out the conveyor and the two fire fighting pipes, judge 3 reports to the main judge faults at laying out the suction hose pipe including the work and line up of the pump operator.

The main judge enters in his scoring form into the column of judge 1 the faults found out by judge 1 and judge 2, into the column of judge 3 the faults found by judge 3 and the main judge himself. He transmits these faults to the column of the main judge and enters the respective number of penalty points into the points-column.

Then the main judge announces the measured time of the fire fighting attack and the faults to the group commander and lets the competition group leave for the obstacle relay race. The group commander gives the necessary commands to the competition group and leads them to the obstacle relay race. A judge of the organisation brings the envelope with the evaluation sheets to the obstacle relay race.

The competition management now calls the next group intended for this competition track, who – as described under section 7.1 – prepare the device for the fire fighting attack.

7.11 Organisation and Function of the Electronic Timing System

7.11.1 Organisation of the Electronic Timing System

If the time of the fire fighting attack is measured by electronic means, two palm switches (buzzers) are to be used for each track. The palm switches shall be firmly mounted on a profile tube or similar construction at a height of 100 cm and secured against falling over (also if accidentally hit by a competitor).
The profile tube shall be fixed firmly in the ground, e.g. with a base plate (at least 50 x 50 cm). The palm switches shall be connected with the stopwatch and the control, in a way to avoid an obstruction of competitors and judges through the required cabling. The resetting of the time to zero shall only be possible at the start buzzer of the main judge, but not at the stop buzzer near the group, in order to prevent that a measured time is deleted prematurely.
The start buzzer is to be placed next to the position of the main judge. The stop buzzer and the time display shall be placed directly at the 41 m demarcation line, 1.25 m to the left of the track centre.
The stopwatch display board is placed at the end of the competition track (one display may be used for each double-track). Technical specifications of the used equipment depend on the product.

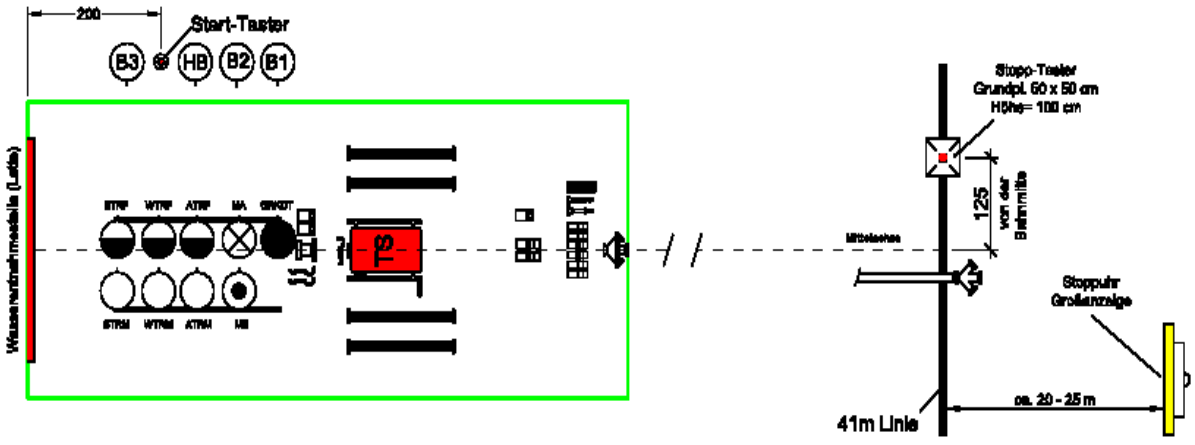


Fig. 27 Organization of the electronic timing system

7.11.2 Function of the Electronic Timing System

At the start of the group the timing system will be activated by the main judge through hitting the buzzer provided for this purpose (Fig. 27).
After both pressure exits of the distributor have been opened by the leader of the hose troop, he moves over to the buzzer, which has been installed on the level of the "41 m demarcation line". After checking whether the group has

finished the fire-fighting attack and stands still, he stops the timing system by hitting the buzzer with the palm of his hand.
Following this, the hose troop leader will immediately assume his final position – which means, he "occupies" the distributor, holding the coupling key close. Before activating the buzzer, the HTRL must occupy the distributor for a short while - if not, "faulty work" will be judged.

Fig. 28: The main judge's preparation for the start

7.11.3 Additional Comments on Using the Electronic Timing System

If the HTRL does not stop the electronic timing (no buzzer activation) or will do so, without hitting the buzzer with the palm of his hand, this will be rated as "faulty work".
In this case, when the HTRL apparently does not stop the timing via hitting the buzzer with the palm of his hand, the time taken by judges 1 and 2 will be counted, whereas the arithmetic means of these two values (rounded to two decimal points) is to be entered into the score sheet.
If the HTRL stops the timing too soon – before the group has finished, each case has to be rated with "incorrect final line-up".
If the HTRL does not occupy the distributor before stopping the timing, "faulty work" will be awarded.
If the HTRL does not occupy the distributor immediately (within 3 seconds) after stopping the timing, this will be rated as "incorrect final line-up".
Both judge 1 and 2 have to continue with their manual stopping, whereby the time between the attack command "advance" (or the start of one group member) and the HTRL's buzzer activation is to be stopped.
Upon a failure of the electronic timing system, or a significant discrepancy, obviously indicating that the electronic timing is inaccurate, the medium value of both manually measured times (rounded to two decimal points) will be recorded in the scoring sheet. (The reason for the electronic timing system providing deficient or apparently inaccurate measurements will not be considered in the scoring.)

7.11.4 Display of the attack time

In order to display the measured running time a digital watch (display with two decimal points) has to be used.
The main judge and the group commander will jointly read the time of the electronic display, which will be entered in the scoring sheet and afterwards acknowledged by the stopwatch of the main judge.

8. THE OBSTACLE RELAY RACE

8.1 Preparations for the Obstacle Relay Race

The group commander leads the competition group from the fire fighting attack to the meeting place for the obstacle relay race. On this way no competitors must be exchanged (otherwise: disqualification). In the cordoned off checking-area before the start the competition groups are again checked. Now the competitor who does not participate in the obstacle relay race is reported to the judge who carries out the inspection. This competitor leaves the obstacle relay race track. If one of the competitors has been injured during the fire fighting attack (dry), he drops out. If another competitor has been injured, the group is taken out of the scoring.

Upon order of the starting judge the competition group marches up to the running track. The order of competitors is defined by the group commander. He thereby defines, which competitor has to surmount which hurdle. The competitor may apply a pre-marking to his running track, which he has to be delete after his run.

8.2 Electronic Timing System

If electronic time keeping is used, the following things must be taken into account:

The time release may occur by a starting pistol or by a light barrier. When a starting pistol is used, the shot releases time keeping. If a horizontal light barrier is used, it must be installed exactly on the start line at a height of 1 metre. One light barrier is needed for each running track. The first runner starts exactly 1 metre in front of the starting line. This "Pre-start line" has to be marked.

At the finishing line time keeping occurs, either by a light barrier over all running tracks or there is an extra light barrier used for each running track. If the finishing line is the same for all running tracks and time keeping occurs by one light barrier over all running tracks, the times of the second and all further competitors coming to the finish must be detectable by video and the appropriate technical device. If there is an own light barrier for every running track, they have to be installed at a height of 1.25 metres.

If there are other techniques used for electronic time keeping, the international competition leader decides – analogously to the provisions above – on their utilisation.

8.3 Operation of the obstacle relay race

If the leader of the obstacle relay race has checked out that the competitors have taken their positions according to the rules and that the time keeper as well as the finish judges are ready for time keeping, he gives the start judges the order to give the starting command. The starter lines up on the side of the start lines and gives the following pre-command: My command will be: "on your marks - go!" Then he gives the valid starting command with the words: My command counts: "on your marks – go!"

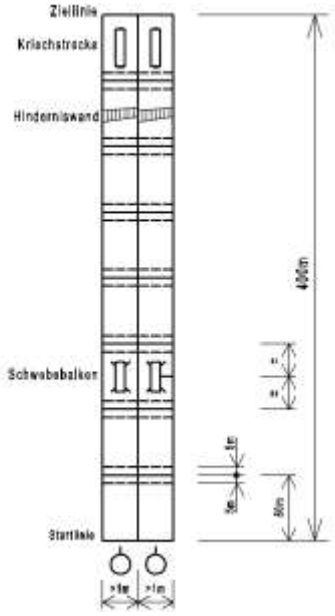
The starting command may also be given with a starting pistol. In this case the pre-command is dropped and the final command is: "on your marks – shot". If one of the competitors causes a false start, the race is interrupted and starts again. If the same competitor causes a second false start, the race is interrupted again and additionally the fault "false start" is rated.

The starting command has to be announced over loudspeaker, intercom system or radiotelephony into the finish, so that the time measurers and the judges at the finish can press their stopwatches. The first runner runs now to the second competitor and gives him the jet pipe. The handing over of the jet pipe has to occur within the handover area (otherwise: "incorrect handing over of the jet pipe"). The second runner takes the jet pipe, runs further to the third runner and hands over the pipe within the handover area again. The third runner has to run over the balancing beam in the middle of his race section. The seventh runner has to climb the barrier wall in the middle of his race section. The eighth runner crawls through the crawling track (tube). (Caution! In women's teams different rules of obstacles – section 4.2.)

If one of the obstacles is circumvented, avoided or left out, or if during the clearing of a hurdle the pipe is thrown over the obstacle or lost, this is rated with "incorrectly surmounted hurdle". If a competitor falls from the beam, which means that he touches the ground before the end of the beam, this is also a fault. If a competitor, however, surmounts an incorrectly cleared hurdle once again, no fault may be rated.

The runner taking over must not be pushed and he must not be run after (otherwise: “incorrect handing over of the pipe”). After the handing over of the pipe, the runner who handed over may, however, run beyond the handover area, when slowing down. The competitors have to run on their running tracks and may not disturb competitors on neighbouring running tracks. This applies particularly to those who slow down after the handing over. In case of deliberate hindrance the competition leader may express disqualification.

As soon as the last runner crosses the finishing, the time keepers and the judges at the finish of the respective running track take the time.



8.4 Tasks of the Judges for the Obstacle Relay Race

The leader of the obstacle relay race has to ensure that the starting only occurs when the competitors have marched up to their places and the time keepers and finish judges are prepared to measure the time. He orders the starting. He controls the work of the judges at the handover areas and at the obstacles as well as the work of the time measurers and finish judges.

Judges control – using the participant list received from calculation committee A – if competitors have been replaced between registration at calculation committee A and obstacle relay race. Not even the substitute man may be replaced, otherwise the competition group will be disqualified. When the ninth competitor has left the running track, the judge at the start lets the competition groups march up to the running tracks.

The judge at the start pays attention that no first runner starts too early. Otherwise he lifts a red flag. Then the race is interrupted and started again. If the same runner causes another false start, the race is interrupted again, additionally this is rated with “False start”.

The judges at the tracks monitor at the handing-over marks, whether the handing over of the jet pipe happens within the handover area and whether the runner taking over is pushed, or the runner handing over runs after him. Faults are signalled with a red flag and are recorded into the respective form. The judges at the obstacles monitor the correct clearing of hurdles. They also signal faults with a red flag and enter them in the report of faults. After each run the reports of faults are collected by a judge and brought to the finish.

The judges at the tracks as well as the judges at the finish check if each competitor carries his complete personal equipment with him until handover or until finish (otherwise “missing personal equipment”).

The time keeper times each competition group at the obstacle relay race and passes the time on to the judge at the finish. The judge at the finish also does the timing and compares it with the time taken by the time keeper. If there are differences, the arithmetical mean of the two times has to be calculated. If one stopwatch has failed or if the timing has obviously been done wrongly, the time timed with the other stopwatch counts. When timed by hand, the time is entered

in the scoring sheet in tenths of a second. Hundredths of a second are rounded off or up (section 7.10). When timed electronically, the time is entered in the scoring sheet in hundredths of a second.

If time keeping is done with an electronic time keeping device, the time keeper has to do the timing nevertheless with the object of checking and the judge at the finish has to take the minutes of the time with the object of checking. If the electronic time keeping device fails, for all competition groups the time timed by hand counts.

The judge at the finish checks if the last runner definitely brought the pipe into the finish. If not, this is rated with "pipe not brought along". If the pipe is dropped during the obstacle relay race and it is picked up again, this is no fault, except during clearing a hurdle (section 8.3).

The result of the obstacle relay race and the possibly made faults are entered into the scoring sheet by a judge. In the point column the time taken for the obstacle relay race as well as the number of penalty points for faults have to be entered.

Then a judge of the organisation takes the envelope with the scoring sheets to calculation committee B.

9. SCORING

The scorings are taken down in the scoring sheet (see attachment). Credit points and penalty points are given. The order of the following description of the credit points and penalty points is the same as the order in the evaluation sheet.

9.1 Credit Points

9.1.1 Standard points

Each competition group gets 500 credit points as standard points.

9.1.2 Age points

Competition groups that start in scoring class B (with credit of age points) receive age points as credit points. In scoring class B competition groups may only participate if each member of the group (including the substitute) is at least 30 years old. Decisive for the calculation of age points is the year of birth (example: The competition is in year 2005. The competitor was born in 1975. So he is – irrespective of his exact birth date – 30 years old). Competitors who are older than 65 years are only allowed for with an age of 65 for the calculation of the age points. To calculate the total age of the competition group the years of the eight competitors participating in the obstacle relay race are added.

From 240 years on there is one credit point awarded for every further 8 years:

240 to 247 years	1 credit point
248 to 255 years	2 credit points
256 to 263 years	3 credit points
264 to 271 years	4 credit points
272 to 279 years	5 credit points
280 to 287 years	6 credit points
288 to 295 years	7 credit points
296 to 303 years	8 credit points
304 to 311 years	9 credit points
312 to 319 years	10 credit points
320 to 327 years	11 credit points
328 to 335 years	12 credit points
336 to 343 years	13 credit points
344 to 351 years	14 credit points
352 to 359 years	15 credit points
360 to 367 years	16 credit points
368 to 375 years	17 credit points
376 to 383 years	18 credit points
384 to 391 years	19 credit points
392 to 399 years	20 credit points
400 to 407 years	21 credit points

408 to 415 years	22 credit points
416 to 423 years	23 credit points
424 to 431 years	24 credit points
432 to 439 years	25 credit points
440 to 447 years	26 credit points
448 to 455 years	27 credit points
456 to 463 years	28 credit points
464 to 471 years	29 credit points
472 to 479 years	30 credit points
480 to 487 years	31 credit points
488 to 495 years	32 credit points
496 to 503 years	33 credit points
504 to 511 years	34 credit points
512 to 520 years	35 credit points

9.2 Penalty Points for the Fire Fighting attack

9.2.1 Time for the Fire Fighting attack

Each second taken for the fire fighting attack is a penalty point. Tenths of a second are tenths of a penalty point.

9.2.2 False Start (5 penalty points)

It is a false start if at least one member of the competition group moves one or both his feet away from the demarcation line before the starting whistle or before the start gun shot.

9.2.3 Dropping of couplings (5 penalty points)

“Dropping of couplings” is rated if a coupling of a suction hose or pressure hose falls down or is dropped. The dropping of a pair of couplings is rated like the dropping of one single coupling, which means this is only rated as one fault.

9.2.4 Wrongly laid down reserve hoses (5 penalty points)

“Wrongly laid down reserve hoses” is rated if a reserve hose is not laid down or set down at the prescribed place (section 7.6).

9.2.5 Left or lost device (5 penalty points)

“Left or lost device” is rated if a competitor at the final line up does not have a prescribed device with him or if it lies on the ground in front of him – only the pump operator is exempt from this rule. “Left or lost device” is also rated if a device has been left at its original place.

9.2.6 Badly laid-out pressure hoses (5 penalty points)

Badly laid-out pressure hoses are rated, if

- a hose has a spin (twisted parallel to its axis more than 360 °);
- a hose is laid down more than 2 metres shortened;
- the B-hose coupled to the portable pump has a sharp bend;
- the winding in the second C-hose of each fire fighting pipe is not laid out correctly;
- the coupling of the second B-hose of the conveyor is not completely behind the marking (41 m);

The check of possible shortenings of each hose has to be done as follows: Both couplings of the hose are fixed. The hose is laid out stretched. The left hose winding may not be more than 2 metres (2 x 1 m).

“Badly laid-out pressure hoses” may only be rated once per hose, also if several faults have been made. Each hose has to be rated separately.

9.2.7 Dragging laid-out hoses (5 penalty points)

“Dragging laid-out hoses” is rated, if a hose which is already completely laid out is pulled across the floor lengthways. It is no fault if a laid out pressure hose is brought into stretched position by pulling at its coupling. If the attack troop man pulls the conveyor in its whole length across the floor to lay down the coupling behind the 36 m-marking, this fault may only be rated once.

9.2.8 Ineffectively or wrongly laid-out valve rope (5 penalty points)

"Ineffectively or wrongly laid-out valve rope" is rated if

- the carbine of the valve rope is not hooked in the ring of the evacuation valve of the suction head;
- the valve rope has not been laid down left beside the portable pump;

"Ineffectively or wrongly laid out-valve rope" may only be rated once, also when several of these faults are made.

9.2.9 Incorrect final line-up (10 penalty points)

"Incorrect final line-up" will be rated, if after having finished the fire fighting attack a competitor does not line up as described in these competition rules until the end of evaluation. "Incorrect final line-up" is also rated if a competitor has not brought a part of his personal equipment (e.g. fireman helmet) to the final line-up.

9.2.10 Faulty work (10 penalty points)

"Faulty work" is rated if competitors do not do their jobs according to these competition rules, with exception of faults which are rated differently. If faults are corrected by competitors who are not designated for the respective task, "faulty work" is rated. However, if an open pair of couplings is coupled by a competitor who is not designated for this, the fault "Open pair of couplings" remains.

In the competition rules "faulty work" is not always pointed out explicitly.

9.2.11 Command wrong or not understandable (10 penalty points)

"Command wrong or not understandable" is rated if

- important parts of an order or command are missing;
- the content of an order or command is wrong;
- prescribed commands are not given (e. g. opening of a pressure exit without command);
- the leader of the attack troops or water troops has a hose carrier or hose fastener in his mouth when giving the order "first/second pipe – water march!"

If orders or commands are not given in the prescribed words, but correctly in their sense of meaning, this is no fault.

9.2.12 Pressure hoses not opened according to regulations (10 penalty points)

The pressure exits at the portable pump have to be opened completely. It is no fault if the valve is turned back halfways to release part of the pressure.

9.2.13 Talking during job (10 penalty points)

"Talking during job" is rated if a competitor talks between the arrival of the main judge before the start and the command "to the device!" after scoring. If the group commander speaks with the main judge during the scoring, this is no fault. If the judges determine "talking during job" at different places or different competitors, each judge notes these cases separately. For the scoring, the main judge has to find out how many different instances of "talking during job" there have been and has to record every single case into the scoring sheet.

9.2.14 Ineffectively fastened suction hose rope (10 penalty points)

"Ineffectively fastened suction hose rope" is rated, if the suction hose rope has not been fastened in the prescribed manner. "Ineffectively fastened suction hose rope" may only be rated once, also if several faults were made.

9.2.15 Open pair of couplings (10 penalty points)

"Open pair of couplings" is rated if after the fire fighting attack a pair of couplings is not coupled or only coupled with a projecting edge and if this fault has not been corrected according to the rules. If several pairs of couplings are open in the suction hose pipe, each pair is rated with "open pair of couplings" separately.

9.2.16 Running away of Water troop or Hose troop before "Sucked up!" (20 penalty points)

"Running away of WTR or HTR before sucked-up!" is rated if a competitor of the water troop or the hose troop enters the area in front of the portable pump before the pump operator's command "sucked-up!", with exception of the leader of the water troops when fastening the suction hose rape. This fault is only rated once, also if two or more competitors make it.

9.3 Penalty points during the obstacle relay race

9.3.1 The time of the obstacle relay race in seconds

Every second taken for the obstacle relay race is a penalty point. Parts of a second are also parts of penalty points.

9.3.2 False start (5 penalty points)

If one competitor causes a false start, the run is interrupted and started again. If the same competitor causes another false start, the race is interrupted again, and only then the fault "false start" is rated. It is a false start if the runner starts before the starter's order (whistle, shot).

9.3.3 Wrong handing over of the pipe (5 penalty points)

"Wrong handing over of the pipe" is rated if the pipe is not handed over within the handover area, if the runner who took the jet pipe has been pushed or run after. During the handing over of the jet pipe both competitors have to be within the handover area with both feet.

9.3.4 Missing personal equipment (10 penalty points)

If a competitor loses a piece of his personal equipment during the race (e. g. fireman's helmet) and if he does not pick it up again, this is rated with "missing personal equipment".

9.3.5 Incorrectly surmounted hurdle (20 penalty points)

"Incorrectly surmounted hurdle" is rated, if an obstacle has been surmounted incorrectly or completely avoided, or if the jet pipe has been lost during surmounting the obstacle or is thrown over the obstacle. If a competitor surmounts an incorrectly overcome obstacle once again, no fault may be rated.

9.3.6 Jet pipe not brought along (20 penalty points)

"Jet pipe not brought along" is rated if the last runner does not bring the jet pipe with him into the finish.

9.4 Scoring of equal points

If two or more competition groups are level on number of points, the following criteria have to be used in the following order until there a decisive scoring has been reached:

1. faultless fire fighting attack
2. better time of faultless fire fighting attack
3. fewer penalty points for fire fighting attack
4. faultless obstacle relay race
5. better time of faultless obstacle relay race
6. fewer penalty points for obstacle relay race

If the competition groups are still level on points, they have to be scored on the same rank (ex aequo).

9.5 Appeal against scorings

Appeals against technical faults, like wrong birth dates, scoring groups or scoring classes, have to be applied for at calculation committee A. Appeals against the evaluation of judges for the fire fighting attack or obstacle relay race may be submitted to the International Competition Leader who will then make his final decision after having heard the responsible judges.

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9.6 Disqualification of a group

Should one or more competitors deliberately violate or rudely attack the regulations of the competition as well as the rules of fairness, should they impede competitors of other teams, or should one team discontinue the competition without permission or convincing reason, it is in the hands of the Leader of Calculation Committee A, the Main Judge or the Leader of the Relay Race to apply for disqualification to the International Competition Leader. The International Competition Leader decides upon the final disqualification.

Reasons for disqualification include:

- Bad behaviour of one or more competitors against judges
- Use of competition devices brought along with

- Giving wrong information in the participants' list
- Deliberate impeding of members of other competing teams during relay race
- Deliberate lining up of a team for the fire fighting competition at a track not assigned to by calculation committee A
- Substituting competitors on the way to the relay race
- Repeated lining up of a competitor in different teams

The International Competition Leader is also entitled to disqualify a team because of unsuitable behaviour, clothing contrary to instructions or any other offence against decency during the lining up for the opening ceremony as well as the presentation ceremony, or during these ceremonies respectively. If fans of individual teams or even a National Team disturb the opening or presentation ceremony in an indecorous way, the International Competition leader is entitled to disqualify the respective team, too. Yet, for the disqualification of a National Team it is necessary to find a consensus of opinion with the Vice-President of the CTIF who is in charge of the international fire brigade competitions. In that case the team (as well as all other teams of the respective nation) will neither be given prizes nor certificates or badges and will be deleted from the ranking list.

10. PRESENTATION CEREMONY

The international organisation committee gives precise instructions for the proclamation of winners. All judges and competitors take part in the proclamation of winners. The proclamation of winners has to be carried out in a particularly dignifying way. The teams march to the VIP lounge on instructions of the international competition leader. The international competition leader announces the lined-up competition groups to the president of the CTIF.

Each competition group receives a document in which the reached number of points is documented as well as the large International Fire Brigade Competition Medal. Those groups which are placed in the first third of the entire evaluation receive the large International Fire Brigade Medal in gold, those which are placed in the second third of the entire evaluation receive the large International Fire Brigade Com-petition Medal in silver, all other groups receive medals in bronze.

The best placed competition groups may be given prizes.
Each competitor, each judge and the organisation personnel receive the International Fire Brigade Competition Badge (section 1.1.)

The presentation ceremony is ended by lowering the International Fire Brigade Competition Flag and a parade of all competitors.

11 GENDERING

As far as in these competition rules personal related terms are only given in male form, they refer to men and women in the same manner.

Photo credits: National Fire Brigade Federation Slovenia,
Regional Fire Brigade Federation of South Tyrol and
Austrian Federal Fire Brigade Federation

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INTERNATIONAL ASSOCIATION OF FIRE AND RESCUE SERVICES
INTERNATIONALE VEREINIGUNG DES FEUERWEHR UND RETTUNGSWESENS
ASSOCIATION INTERNATIONALE DES SERVICES D'INCENDIE ET DE SECOURS

CTIF

…..... International Fire Brigade Competitions, ...….....

VALUATION FORM – TRADITIONAL INTERNATIONAL FIRE BRIGADE COMPETITIONS

Group No.: _____ Name: _____ Nation: _____

CREDIT POINTS						Points	***Sum***
1	Standard points					500	
2	Age sum of the competition group (years)		Age points				
Total of credit points:							
PENALTY POINTS							
Fire-fighting attack			J1	J3	MJ		
1	Time for fire-fighting attack in seconds and tenths of a second (one decimal point)						
2	False Start	5					
3	Dropping of a coupling per piece	5					
4	Incorrectly placed reserve hoses per piece	5					
5	Left or lost device per piece	5					
6	Badly laid-out pressure hoses per hose	5					
7	Dragging laid-out hoses per hose	5					
8	Ineffectively or wrongly laid-out valve rope	5					
9	Incorrect final line-up per case	10					
10	Faulty work per case	10					
11	Command wrong or not understandable	10					
12	Pressure hoses not opened according to regulations per piece	10					
13	Talking during job per case	10					
14	Ineffectively fastened suction hose rope	10					
15	Open pair of couplings per pair	20					
16	Runaway of WTR or HTR before "Sucked-up"	20					
Sum of penalty points for the fire fighting attack:							
Obstacle Relay Race:							
1	Time of Obstacle Relay Race in seconds and hundredths of a second (two decimal points)						
2	False start	5					
3	Wrong handing over of the jet pipe	5					
4	Missing personal equipment per case	10					
5	Incorrectly surmounted hurdle per case	20					
6	Jet pipe not brought along per case	20					
Sum of penalty points for the obstacle relay race:							
SUM OF POINTS:							

……..	……	……..
Judge 1	Judge 3	Main Judge
……	……	……..
Leader Obstacle Relay Race	Calculation Committee B	Group Commander

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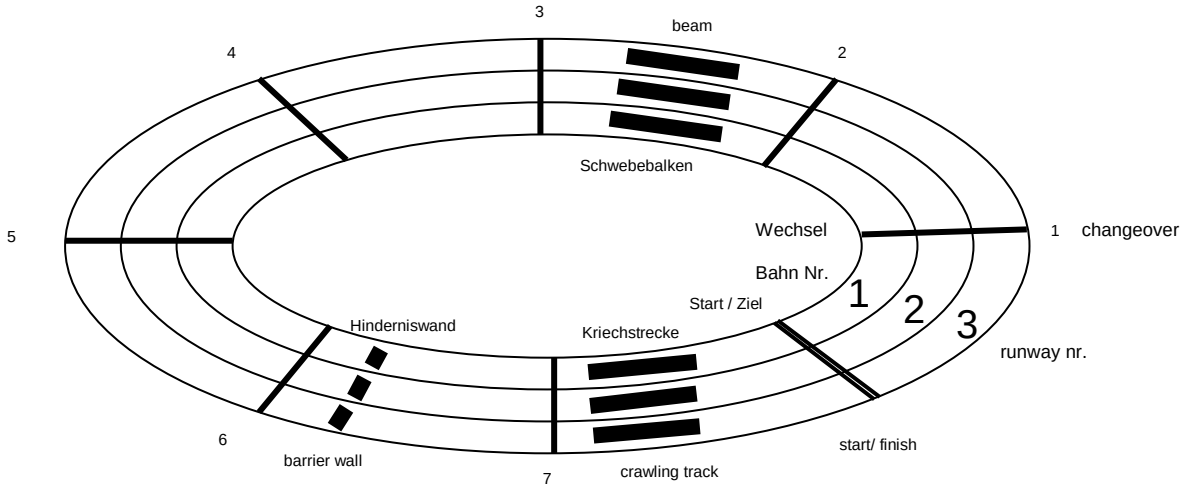
ASSOCIATION INTERNATIONALE DES SERVICES D'INCENDIE ET DE SECOURS

CTIF

Hindernis-Staffellauf (trad. Feuerwehrwettbewerb) Männer A +B

Relay-race (traditional competition) men's classification A +B



Laufbahn Nr. Running track nr.	1		2		3		
Wechsel Nr. Changeover nr.	1	2	3	4	5	6	7
Läufer Nr. Runner nr.	1	2	3	4	5	6	7	8

- Falsche Strahlrohrübergabe (Incorrect transfer beam-pipe) ☐
- Fehlende persönliche Schutzausrüstung (Missing personal protective equipment) ☐
- Nicht richtig überwundenes Hindernis (Incorrectly surmounted hurdle) ☐
- Sonstiger Fehler (z.B. absichtliche Behinderung) (Other mistake, e. g. deliberate impediment) ☐

.....

Name Wertungsrichter:

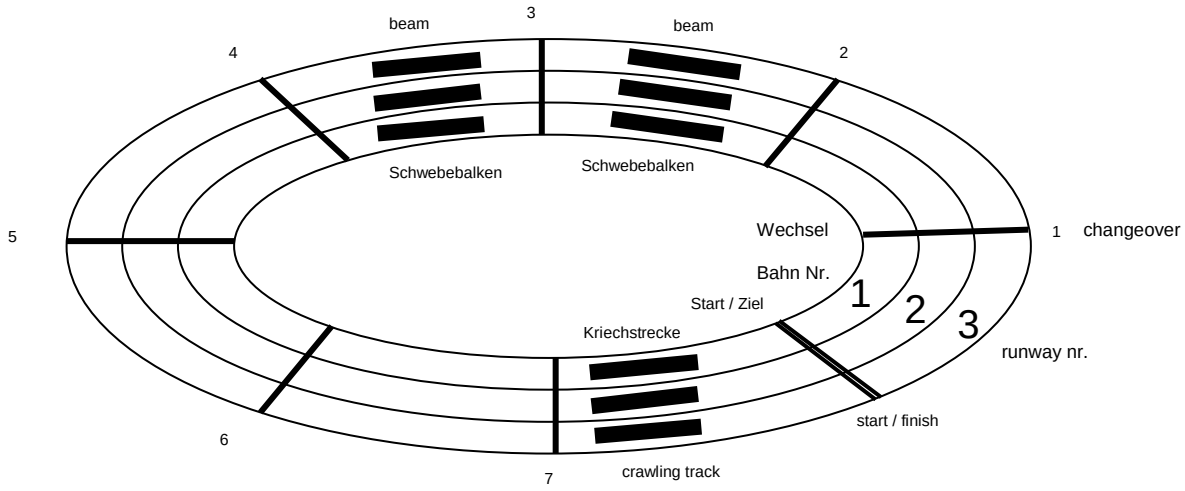
Name of referee : .....

INTERNATIONAL ASSOCIATION OF FIRE AND RESCUE SERVICES
INTERNATIONALE VEREINIGUNG DES FEUERWEHR UND RETTUNGSWESENS
ASSOCIATION INTERNATIONALE DES SERVICES D'INCENDIE ET DE SECOURS

CTIF

Hindernis-Staffellauf (trad. Feuerwehrwettbewerb) Frauen Klasse A+B

Relay-race (traditional competition) women's classification A+B



Laufbahn Nr. Running track nr.	1		2		3			
Wechsel Nr. Changeover nr.	1	2	3	4	5	6	7	
Läufer Nr. Runner nr.	1	2	3	4	5	6	7	8

- Falsche Strahlrohrübergabe (Incorrect transfer beam-pipe) ☐
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- sonstiger Fehler (z.B. absichtliche Behinderung) (Other mistake e. g. deliberate impediment) ☐

.....

Name Wertungsrichter:

Name of referee : .....