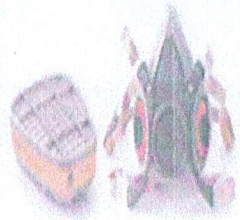
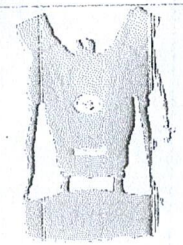
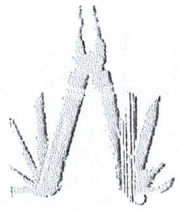
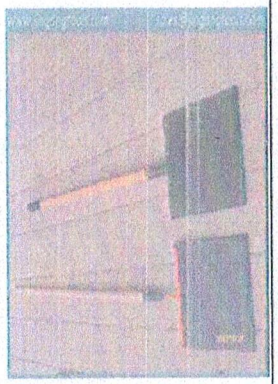
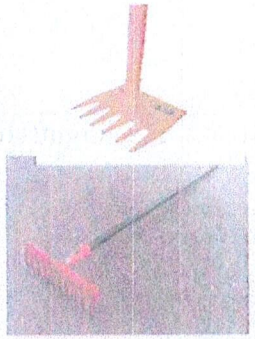
SPECIFICATIONS OF EQUIPMENT/CLOTHING FOR FOREST FIRE

Srl No.	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS	Addl. Remarks/ Compliance required	Photos	Comm
		PERSONAL PROTECTIVE EQUIPMENT			
1.	Helmet with face Shield	**BASIC PARAMETERS –** **Impact absorbent** – Should be made of polyurethane. **Interior**–i) Net should be made of Nomex (easy to remove and install) ii) sweatband should be made of polyurethane foam and covered with genuine leather. **Size**–Size should be adjustable from 54 to 62 cm (optionally 51 to 65 cm) **Visor and goggles**–visor should be metalized and transparent, removable, resisting scratch, vapours and chemical effects, made of polycarbonate. **Neck Protector** – should be easy to remove and install and of following materials i) Made of non-inflammable fabric (short), and Made of non-inflammable fabric (long) or, ii)Made of aluminized fabric. **Reflecting stripes** – should consist of reflecting stripes on all sides. **Accessories** – i)The Helmet should be equipped with holders for mask attachment, torch, and Communication system ii) Weight should not be more than 1500 gm–	**EN 443:2008, EN14458:2004,** **This European Standard is to provide essential performance requirements for protective helmets for Fire fighters**		
2.	Safety Glasses/Goggles	1. Impact -resistant Poly carbonate lenses 2. UV Protection. 3. Protection against- smoke and fire dust Particles. 4. Wrap around design (for maximum coverage and protection for the eyes). 5. Anti-fog coating and scratch resistance. 6. Adjustable straps.	**EN 171:2002** **This European Standard specifies the scale numbers and transmittance requirements for filters**		

		7. Withstand extreme temperature up to 150 degrees Celsius. 8. Weight – Not more than 150 Gm. 9. Angle of view- 180^0 – 240^0 10. Warranty-at least 2 Years	**for protection against infrared radiation**		
Srl No	**NOMENCLATURE OF EQUIPMENT**	**SPECIFICATION OF ITEMS**	**Addl. Remarks**	**Photos**	**Comment**
3.	Fire Mask/Respirator (to obtain latest from DRDO) The comfo respirator was for plastic suit and may not be suitable for the forest fire, hence these specifications have been indicated.	1. protection against heat radiation and particles. 2. The Mask should offer complete facial protection against heat radiation and incandescent particles, burns and reducing possible inhalation of contaminants. 3. The design should include high-visibility reflective strips on both sides and a fixing system so it can be put on without having to take the helmet off. It should feature a double Velcro system for use and rest and can be comfortably worn hanging from the neck when not being used. 4. Thread composition 100% meta-aramid thread. 5. Composition of silver reflective fabric 100% F.R. cotton. 6. Weight not more than 120 g.	EN 403		

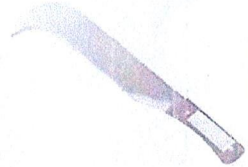
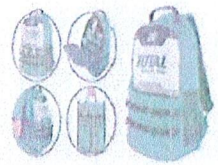
Sr.no	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS	Addl. Remarks	Photos	Comme
4.	Fire proximity/ resistant suit (Jacket, trousers/, boots, gloves)	**JACKET/ TROUSERS** • Material – fire resistant material. Example:- such as NOMEX or KEVLAR etc. 1. Moisture barrier to protect against steam & boiling water. 2. A breathable lining to keep the wearer cool and comfortable 3. Adequate ventilation to prevent overheating 4. Reflective tape on jacket (Front , arm and back) 5. High neck 4 inch collar with overlap and fire resistant Velcro. 6. Central closer with a fire –resistant open end zipper (zipper should be concealed by a flap of the outer shell.) 7. Adjustable wrist and outer fire resistant Velcro. 8. Temperature bearing capacity- at least 1000^0 Celsius for 10 secs. 9. Washable (heat and flame resistant quality should not diminish with washing) 10. Should have reinforced areas such as Elbow and shoulders to provide extra protection from wear and tear 11. Lightweight 12. Warranty- at least 1 year **Standards**-Composition of the lining 100% fire-retardant cotton. Sizes XS, S, M, L, XL, XXL. **Gloves:** Gloves when tested as per EN 659 should pass minimum standard as: Burning behavior &convective heat. **BOOTS** 1. Should be made of durable materials such as leather or	**The suit must meet the NFPA (National fire protection association) 1971; 2007 or EN** **Gloves-EN 659 or NFPA.** European Standard which defines minimum performance requirements and test methods for firefighters' protective gloves **EN 15090-2012**		

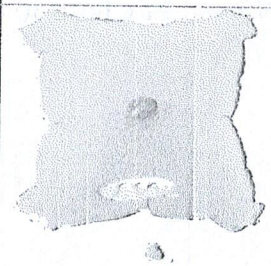
		synthetic leather, with reinforced toe and heel areas. 2. A sturdy, heat and abrasion resistant sole. 3. Soles of the boots should have a deep thread and be slip-resistant to provide good traction on uneven and slippery terrain. 4. Should be waterproof and insulated to protect the feet from extreme heat and cold. 5. Should have high ankle support. 6. Lightweight. 7.Warranty- at least 1 year			
5.	Hydration pack (5 Ltr)	The Mobile Back strap Hydration System should comfortably transport water while deployed. 1. Constructed with a durable denier polyester (Multicam 1000 Denier Nylon) and polyurethane bladder with neoprene covered hose, ii) Hydration pack to hold min. 5 Ltrs of water. iii)The neoprene covered plastic hose with soft bite valve to feature on/off switch which prevents dripping when not in use. iv) Durable, lightweight To be purchased after assessing the market and the quality. So, specification is not required			No chang
BASIC HAND TOOLS					
6	Multi-functional tool	1.Multi use tool with lockable functions 2.Compact size and durable leather pouch 3.Material- Stainless steel 4.Weight- Not more than 350 gm 5.Guarantee- life time Function (Pliers, wire cutter for thin & soft wire, hard wire cutter, screwdrivers 2, 3, 5 & 7.5 mm, strong crate opener, can opener, bottle opener, wire blender, large blade, metal saw, metal file, large blade with ivory edge, wood saw, reamer, punches , screwdriver 1/2 , chisel and scraper, wire stripper, wire scraper, wire crimping tool (electric), ruler (230 mm), ruler (9 inch), coupling for			

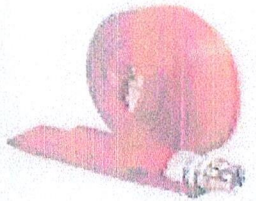
		cork screw, lanyard hole).			
Srl No	**NOMENCLATURE OF EQUIPMENT**	**SPECIFICATION OF ITEMS**	**Addl. Remarks**	**Photos**	**Comme**
7.	Fire beater/flapper	1.Materials- Durable and heat resistant such as or stainless steel. 2.Size- large enough to cover a significant area and should be easy to handle. 3.Handle- comfortable to hold and should be heat resistant material. 4. Length should be minimum 1.6 meters. 5.Shape- flat shape that allows for easy spreading of the flames. 6.Weight- light weight for easy maneuverability. (not more than 2 KG) 7.Durability- able to withstand repeated use and exposure to heat and flame. 8.Safety features- Non slip grip, safety guard to protect the user from burn 9.Should have reflective tape 10.Carrying case or cover for safety of equipment. 11.Warranty- 1 year	Wooden handle is better and not metal		
8	Rake (Arrow type/ nail type/ Peg tooth type)	1.Material- Durable and heat resistant material such as stainless steel or MS. 2.Size- at least 24 inches in length with a width of at least 6 inches. 3.Teeth- variety of teeth type, including arrow, nail and peg tooth to effectively break up and clear debris. 4.Handle : should have a sturdy, ergonomic handle that is easy to grip and provide comfortable grip for extended use. 5. 6.Weight- light weight, max. wt. - 2 kg for easy			

		maneuverability. 7.Should have reflective tape / striping on the handle and teeth. 8.Carrying case or cover for safety of equipment 9.Warranty- 1 year			
Srl No	**NOMENCLATURE OF EQUIPMENT**	**SPECIFICATION OF ITEMS**	**Addl. Remarks**	**Photos**	**Comme**
9.	Fire broom (Jhapa)	1. Durability- should be constructed with durable material that can withstand high temperatures and heavy use. 2. Heat Resistance- the handle and bristles of the fire broom should be able to withstand extreme heat without melting or breaking. 3. Size- Should be large enough to cover a wide area but also small enough for maneuverability in tight spaces. 4. Bristle material- should be made of heat resistant materials such as nylon or polypropylene. They should also be stiff enough to scrub away debris 5. Handle- should be made of a heat resistant material such as aluminum or fire glass It should also be long enough to provide a comfortable grip and easy maneuverability 6.Replaceable broom head 7.Light weight (max. 2KG) 8.Safety feature- Non slip grip and guard to protect the user from hot debris. 9. Steel wire-2mm diameter 10. Length of broom- 45-50 cms 11. Wooden handle	Wooden handle or bamboo lath type that is durable		
10.	Flashlight(High beam)	Brightness – At least 1000 Lumens 2.Beam distance-at least 200 mt, allowing fire fighters to see far into dark and smoky environment 3.Run time- at least 2 hrs. on high beam 4. Battery life- at least 15 hrs of continuous use on single charge 5.Size & weight- compact & light weight (not more than			

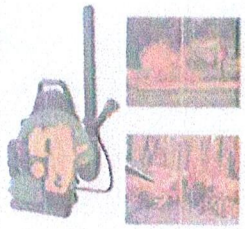
		700 gm) 6.Should also have a tail switch, which makes it easy to operate while wearing gloves. 7.Should be heat resistant and shock proof 8.Water proof and dust proof IP-67 9.Charging Time: less than 6 hours 10.Battery Type: Rechargeable Lithium Ion Battery. 11.Battery life expectancy-at least 1500 cycles 12.Adjustable focus 13.Should be made of durable material such as aluminium or rubber 14.Strobe or SOS feature to signal for help in emergency situations 15.Non slip grip 16.LED technology (LED life-100000 hrs or more) 17.Warranty –2 year			
11.	Wind meter	1. Should be able to measure wind speed and direction with high accuracy. 2. Durable construction- Should be designed to withstand harsh outdoor conditions, including high temperatures humidity and exposure to dust and debris. 3. Portable and light weight 4. Simple and intuitive interface that allows for easy operation even in low light conditions. 5. waterproof and dust proof (IP-67 rating) 6. Should have a backlit display 7. Should have the ability to store wind speed data for later analysis. 8. Long Battery life: at least10 days 9. With lanyard Warranty-at least 2 years			No cha

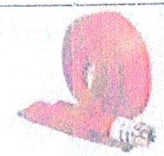
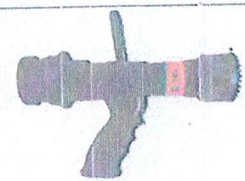
12.	Pathal (modified sickle)	1.Blade material- high quality carbon steel/ stainless steel. 2.Blade length –18-20 inches 3.Blade shape- curved with a sharp serrated edge 4.Handle material- durable and light weight eg. wood, plastic or rubber for easy handling and manoeuvrability. 5.Handle length- Long enough to provide a comfortable grip and control while cutting, but not too long 6.Safety features- should have a guard or safety ring to protect the hand from the blade and a locking mechanism to keep the blade securely in place while in use. Weight- not more than 1.5 kg Durability- able to withstand heavy use and exposure to harsh conditions such as extreme temperature and rough terrain. 7.A protective sheath for safe storage and transportation. 8. Warranty- 1 year			No chan
Srl No	**NOMENCLATURE OF EQUIPMENT**	**SPECIFICATION OF ITEMS**	**Addl. Remarks**	**Photos**	**Commen**
13.	Tool kit bag	1. It should be made of tear resistance ballistic material. 2. It should consist of 48 total pockets including 2 hardshell pockets to protect electronics and equipment from impact. 3. Dimension should be minimum:- D- 24 cm, W- 45 cm & H - 51 cm with ±5% 4. It should have padded and breathable load-bearing harness that evenly distributes the weight for more comfort and jobsite performance 5. It should have adjustable chest strap and attachment strap for rolling bags 6. It should have Rugged metal zippers to provide			No chan

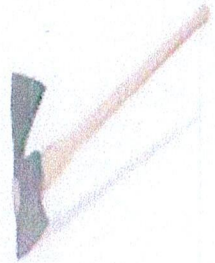
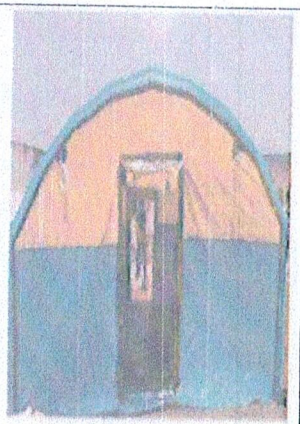
		increased durability It should have a hard molded base that allows backpack to stand up and protects from ingress of dirt and water			
14.	Portable water tank(Collapsible)	1.Capacity- at least 500 litre. 2.Material- heavy duty, (discuss) chemical resistant PVC 3.Durability- reinforced PVC giving maximum stability and able to withstand repeated use and rough handling. 3.Light weight (empty weight not more than 10 kg) and easy to carry with built- in- handles or straps. Folded size shall not exceed by 70X45X45 cm. 4.Easy to fill and empty. 5.Easy to clean. 6.Weather resistant- should be able to withstand extreme temperature and weather conditions such as heat, cold and rain. 7.Safety feather - should have a secure lid and a pressure relief valve to protect leaks and spills. 8.Warranty- 1 year			

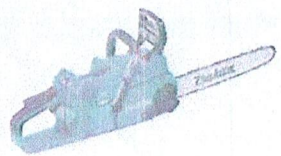
Sl No	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS	Addl. Remarks	Photos	Comme
15.	Fire hose 30 m	1.Should be light weight and easy to handle. 2.Should be made of a durable material that can withstand exposure to heat, abrasions and punctures. 3.Should have a high burst pressure and a high flow rate. 4.Should have a low friction loss, which will reduce the amount of water pressure lost as the water flows through the hose. 5.Should be resistant to kinking and collapsing so the water flow is not interrupted. 6.Made of a material that does not leave a toxic residue. 7.Easy to roll and pack 8.Warranty- at least 1 year 9. Length: 30 m 10. 63 mm diameter (IS 906 for coupling made of gun metal-male and female couplings 63 mm dimeter)	IS 14933 Type A, B Canvas is to be used for wild situation. (Tyepe A is suitable. Made of canvas)		No chan

Advanced /Specialised Tools

Srl No	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS		Addl. Remarks	Photos	Comme
16.	Leaf blower	1. High air flow and volume - not less than 350 CFM (cubic feet per minute) 2. Light weight and portable, (not more than 12Kg) 3. Should be built to withstand heavy use and be able to withstand exposure to dust, dirt and other debris. 4. Battery operated/ Petrol operated (Preference for battery operated) 5. Long battery life (18- 22 V Li-ion Battery) 6. Run time- at least 1 hr of continuous use on single charge 7. Fuel tank – at least 2 Ltr. 8. Fuel Efficiency (at high power) – not more than 2.5 L/h 9. Engine power- 3-5HP 10. Displacement -55-65 CC				
17.	Drip torch	A double-threaded cover design makes for compact transportation and quick assembly for use. Can be carried on the backpack belt. Safety Tank approved for fuel transportation. Burner with 360° return to prevent internal deflagration. Flow regulator valve. Weight Max 500 Grams Fuel Blend for use 2/3 Diesel +1/3 Petrol The burner with 360° return and flow regulator valve makes the drip torch a safe and efficient tool. Its includes- 1 Fuel tank.				

		2 Detachable handle. 3 Wick. 4 Anti-return system.				
18.	Fire fighting Hose	1.Length – 30-50 Mtr 2.Material – PVC or rubber 3.Dia – 2-4 inches 4.Working pressure – at least 150 PSI 5.Burst pressure – at least 450 PSI 6.Couplings – Brass or Aluminum 7.Nozzle – Adjustable with multiple spray pattern 8.Kink and abrasion resistant 9.UV and Ozone resistant 10.Light weight 11.Color – Orange or yellow 12.Warranty- at least 1 year	Specification from the Fire service IS same			
19.	Branch pipe variable flow (Lightweight)	1.Material- Lightweight and durable materials such as aluminium or high density polyethylene (HDPE) 2.Flow rate- 200 -800 Ltr /Min (adjustable) 3.Nozzle - should come with a nozzle that can be adjusted to produce different spray patterns such as straight stream, fog or cone pattern 4.Dia-2.5 to 4 inches 5.Resistant to corrosion and wear 6.Withstand high temperature and rough terrain 7.A low friction loss design to minimize restriction and maximize water flow 8.Built-in pressure relief valve and water shut-off valve 9.Warranty- at least 1 year 10. compatible with fire water pump.	IS			

20.	Pulaski Tools	1.Material- High carbon steel blade 2.Blade length- 9-12 inches 3.Blade width- 2-3 inches 4.Handle- ergonomic design with a rubber grip for comfortable and secure handling 5.Handle material- fiberglass or wood 6.Weight- not more than 2.5 kg 7.Sheath- heavy duty nylon or leather sheath for safe storage and transport 8.Rust and corrosion resistant 9.Total length- 30 to 36 inches 10.A single bit axe blade on one side and a mattock blade for digging on the other. 11.Axe head should be hydraulically seated onto the handle and secured with a serrated metal edge. 12..Eye section should be dried to below 10% moisture to prevent shrinkage or loosening. 13.Warranty- 1 year				
MISCELLANEOUS EQUIPMENT						
21.	INFLATABLE RECTANGULAR TENT- 7.5 Mtrs X 5.5 Mtrs	1.Windows -6 no's with Mosquito net windows Doors 2. 2 nos. Entrance/Exit Anchoring 3.8 nos. (Steel pegs of 0.5mtrs length with rope of 10 meter length each for Anchoring) 4. Accessories Tie rope, steel pegs for anchoring, Repair kit (Including swatches, adhesive), AC blower with Lithium Ion battery, Solar system includes Solar Panel, Solar Operated lights, Fans and Exhaust fans, Invertor, Hammer along with Carry bag for Tent & accessories 5. Blowers and Batteries -2 No AC blower-7.0Kg, Solar System-52 Kgs				

		8. Weight of Tent- Weight of Tent 125 +/- 7 Kgs, Other Offerings 55 +/-5 Kgs & Accessories 55 kgs approx. 9. User manual -Manual with complete operations, Do's & Don'ts 10.Valve for inflation-Two Valve Digital manometer 11.Solar Powered digital manometer 12.It operates directly from sunlight. To turn it on just place it in a well-lit environment. 13. Safety Valve-One Pressure relieve valve for over pressure safety				
22..	Chain saw(Battery operated)	Battery Capacity Min 40 V Guide Bar Length Min 16" (400 mm) Chain Saw Speed Min 0-5000 fpm Weight Max 6 Kgs Low noise level at only 104 dB(A) with zero emissions for operator comfort and reduced environmental impact Tool less bar mounting and chain tension adjustment for quick and easy set up and adjustment on the jobsite Automatic chain oiler maintains optimal bar/chain lubrication during operation with no adjustments required Chain oil view window enables operator to easily check oil level Push-button on/off switch with auto power-off function for extended battery life Lock-off button prevents accidental start up for maximum operator safety Variable speed trigger switch (0 - 5,020 FPM) Inertia chain brake provides maximum operator protection if kickback occurs				

		Wet guard with IPX4 rating offers maximum protection in wet environment. Ergonomic soft rubber grip design for vibration absorption and comfortable operation				
Srl No	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS		Addl. Remarks	Photos	Comme
23.	First Aid Kit	Bandages – Assorted size of adhesive bandage gauze pads and wound clause strips 6Adhesive strip(2"X3") 2 Adhesive oval bandage (2"X4") 6 Butter fly Bandage(Med) 3Knuckle Bandage 1 Flat rolled Elastic Bandage(3")W/Velcro Closer 1Traingular Bandage 1Compressed wound packing gauze 1Conforming gauze roll(3") 2 Gauze pad(4"X4", 2Pack) 2Gauze pad (3"X3",2 Pack) 2 Gauze pad(2"X2", 2Pack) 1 Trauma Pad(8"X10") 1 Adhesive Tape(1"X10 Yds) 1 Burnet Dressing (4"X4") Secure lasing 3" Conforming Gauze 2 Second Skin Dressing (1.5"X2") can also be used for blisters 1 Semi permeable dressing(4"X4.75") 1Moleskin Kit (6 - 2"X3"Pads) 2Ivy X Poison Ivy Cleanser Pads **.Antiseptics**- alcohol wipes, hydrogen peroxide and antibiotic ointment 4 Triple antibiotic ointment unit dose 2 Antiseptic Towelled 1 Tincture of benzoin (Improves adherence for butterfly bandages) 2 Hydrocortisone cream (1%) unit dose				

		2 Sal jet saliva vial **.Pain relief-** ibuprofen (NSAID) 200 mg tablets(2Pack) 3 Sting relief pad **.Eye** Care Eye wash solution and eye drops .1 SWAT-T Tourniquet **.PPE** 1 Pair Nitrile Gloves (Rolled) 1CPR Face Shield .Tools 1 Tweezer and safety pin kit 1 EMT Trouma Shears(5.5") 1 Thermometer .Burn Gel unit dose/Aloe vera gel . 2 Diphenhydramine (Antihistamine) 25mg caplet . 1Bug X Towelette , unit dose .1Sunscreen, Unit dose . 1First aid manual (Guide to first aid and emergency care) .Water proof and durable carrying case		

SPECIFICATIONS OF EQUIPMENT/CLOTHING FOR FOREST FIRE

S/No.	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS	Addl. Remarks/ Compliance required	Photos	Comments
PERSONAL PROTECTIVE EQUIPMENT					
1.	Helmet with face Shield	**BASIC PARAMETERS –** **Impact absorbent** – Should be made of polyurethane. **Interior**–i) Net should be made of Nomex (easy to remove and install) ii) sweatband should be made of polyurethane foam and covered with genuine leather. **Size**–Size should be adjustable from 54 to 62 cm (optionally 51 to 65 cm) **Visor and goggles**–visor should be metalized and transparent, removable, resisting scratch, vapours and chemical effects, made of polycarbonate. **Neck Protector** – should be easy to remove and install and of following materials i) Made of non-inflammable fabric (short), and Made of non- inflammable fabric (long) or, ii)Made of aluminized fabric. **Reflecting stripes** – should consist of reflecting stripes on all sides. **Accessories** – i)The Helmet should be equipped with holders for mask attachment, torch, and Communication system ii) Weight should not be more than 1500 gm–	**EN 443:2008, EN14458:2004,** **This European Standard is to provide essential performance requirements for protective helmets for Fire fighters**		

DCIF, CISF

DIG (North Zone)

DCFO (DFS)

Minakshi

S/No	NOMENCLATURE OF EQUIPMENT	SPECIFICATION OF ITEMS	Addl. Remarks	Photos	Comments
2.	Safety Glasses/Goggles	1. Impact -resistant Poly carbonate lenses 2. UV Protection. 3. Protection against- smoke and fire dust Particles. 4. Wrap around design (for maximum coverage and protection for the eyes). 5. Anti-fog coating and scratch resistance. 6. Adjustable straps. 7. Withstand extreme temperature up to 150 degrees Celsius. 8. Weight – Not more than 150 Gm. 9. Angle of view- $180^0 – 240^0$ 10. Warranty-at least 2 Years	**EN 171:2002 This European Standard specifies the scale numbers and transmittance requirements for filters for protection against infrared radiation**		
3.	Fire Mask/Respirator (to obtain latest from DRDO) The comfo respirator was for plastic suit and may not be suitable for the forest fire, hence these specifications have been indicated.	1. protection against heat radiation and particles. 2. The Mask should offer complete facial protection against heat radiation and incandescent particles, burns and reducing possible inhalation of contaminants. 3. The design should include high-visibility reflective strips on both sides and a fixing system so it can be put on without having to take the helmet off. It should feature a double Velcro system for use and rest and can be comfortably worn hanging from the neck when not being used. 4. Thread composition 100% meta-aramid thread. 5. Composition of silver reflective fabric 100% F.R. cotton. 6. Weight not more than 120 g.	**EN 403**		

DIG (North Zone)

DyCFO, DFS

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
4.	Fire proximity/ resistant suit (Jacket, trousers/, boots, gloves)	**JACKET/ TROUSERS** • Material – fire resistant material. Example: - such as NOMEX or KEVLAR etc. 1. Moisture barrier to protect against steam & boiling water. 2. A breathable lining to keep the wearer cool and comfortable 3. Adequate ventilation to prevent overheating 4. Reflective tape on jacket (Front, arm and back) 5. High neck 4-inch collar with overlap and fire-resistant Velcro. 6. Central closer with a fire –resistant open-end zipper (zipper should be concealed by a flap of the outer shell.) 7. Adjustable wrist and outer fire-resistant Velcro. 8. Temperature bearing capacity- at least 1000^0 Celsius for 10 secs. 9. Washable (heat and flame-resistant quality should not diminish with washing) 10. Should have reinforced areas such as Elbow and shoulders to provide extra protection from wear and tear 11. Lightweight 12. Warranty- at least 1 year **Standards**-Composition of the lining 100% fire-retardant cotton. Sizes XS, S, M, L, XL, XXL. **Gloves:** Gloves when tested as per EN 659 should pass minimum standard as: Burning behavior &convective heat. **BOOTS** 1. Should be made of durable materials such as leather or synthetic leather, with reinforced toe and heel areas.	**The suit must meet the NFPA (National fire protection association) 1971; 2007 or EN** **Gloves-EN 659 or NFPA.** European Standard which defines minimum performance requirements and test methods for firefighters' protective gloves		

DC(P), CI SZ

DIG (North Zone)

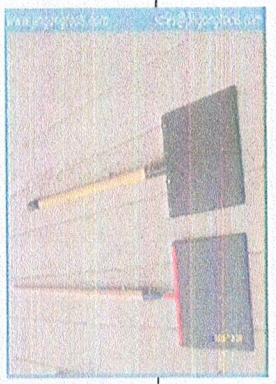
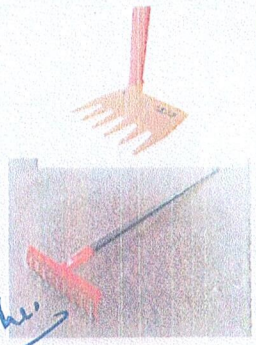
DyCFO (DFS)

Minakshi

No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		2. A sturdy, heat and abrasion resistant sole. 3. Soles of the boots should have a deep thread and be slip-resistant to provide good traction on uneven and slippery terrain. 4. Should be waterproof and insulated to protect the feet from extreme heat and cold. 5. Should have high ankle support. 6. Lightweight. 7.Warranty- at least 1 year	EN 15090-2012		
	Hydration pack (5 Ltr)	The Mobile Back Strap Hydration System should comfortably transport water while deployed. 1. Constructed with a durable denier polyester (Multicam 1000 Denier Nylon) and polyurethane bladder with neoprene covered hose, ii) Hydration pack to hold min. 5 Ltrs of water. iii)The neoprene covered plastic hose with soft bite valve to feature on/off switch which prevents dripping when not in use. iv) Durable, lightweight To be purchased after assessing the market and the quality. So, specification is not required			No change
BASIC HAND TOOLS					
	Multi-functional tool	1.Multi use tool with lockable functions 2.Compact size and durable leather pouch 3.Material- Stainless steel 4.Weight- Not more than 350 gm 5.Guarantee- 5 years Function (Pliers, wire cutter for thin & soft wire, hard wire cutter, screwdrivers 2, 3, 5 & 7.5 mm, strong crate opener, can opener, bottle opener, wire blender, large blade, metal saw, metal file, large blade with ivory edge, wood saw, reamer, punches, screwdriver 1/2, chisel and scraper, wire stripper, wire scraper, wire crimping tool (electric),			

DC/F, CLSS

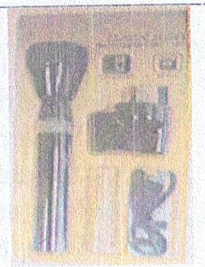
DyCFO, DFS

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		ruler (230 mm), ruler (9 inch), coupling for cork screw, lanyard hole).			
7.	Fire beater/flapper	1.Materials- Durable and heat resistant : **Beater of Industrial Rubber and handle of wood** 2.Size- large enough to cover a significant area and should be easy to handle. 3.Handle- comfortable to hold and should be heat resistant material. 4. Length should be minimum 1.6 meters. 5.Shape- flat shape that allows for easy spreading of the flames. 6.Weight- light weight for easy maneuverability. (not more than 2 KG) 7.Durability- able to withstand repeated use and exposure to heat and flame. 8.Safety features- Non slip grip, safety guard to protect the user from burn 9.Should have reflective tape 10.Carrying case or cover for safety of equipment. 11.Warranty- 1 year	Wooden handle is better and not metal		
8	Rake (Arrow type/ nail type/ Peg tooth type)	1.Material- Durable and heat resistant material such as stainless steel or MS. 2.Size- at least 24 inches in length with a width of at least 6 inches. 3.Teeth- variety of teeth type, including arrow, nail and peg tooth to effectively break up and clear debris. 4.Handle: should have a sturdy, ergonomic handle that is easy to grip and provide comfortable grip for extended use. 5. 6.Weight- light weight, max. wt. - 2 kg for easy maneuverability. 7.Should have reflective tape / striping on the handle and			

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		teeth. 8.Carrying case or cover for safety of equipment 9.Warranty- 1 year			
.	Fire broom (Jhapa)	1. Durability- should be constructed with durable material that can withstand high temperatures and heavy use. 2. Heat Resistance- the handle and bristles of the fire broom should be able to withstand extreme heat without melting or breaking. 3. Size- Should be large enough to cover a wide area but also small enough for maneuverability in tight spaces. 4. Bristle material- should be made of heat resistant materials such as nylon or polypropylene. They should also be stiff enough to scrub away debris 5. Handle- should be made of a heat resistant material such as aluminum or fire glass. It should also be long enough to provide a comfortable grip and easy maneuverability 6.Replaceable broom head 7.Light weight (max. 2KG) 8.Safety feature- Non slip grip and guard to protect the user from hot debris. 9. Steel wire-2mm diameter 10. Length of broom- 45-50 cms 11. Wooden handle	Wooden handle or bamboo lath type that is durable		

DIG (North Zone)

Dy CFO, DFS

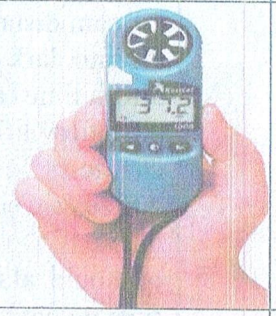
S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
10.	Flashlight(High beam)	Brightness – At least 1000 Lumens 2.Beam distance-at least 200 mt, allowing fire fighters to see far into dark and smoky environment 3.Run time- at least 2 hrs. on high beam 4. Battery life- at least 15 hrs of continuous use on single charge 5.Size & weight- compact & light weight (not more than 700 gm) 6.Should also have a tail switch, which makes it easy to operate while wearing gloves. 7.Should be heat resistant and shock proof 8.Water proof and dust proof IP-67 9.Charging Time: less than 6 hours 10.Battery Type: Rechargeable Lithium Ion Battery. 11.Battery life expectancy-at least 1500 cycles 12. With Adjustable focus for Beam Intensity 13.Should be made of durable material (aluminium or Polymer) 14.Strobe or SOS feature to signal for help in emergency situations 15.Non slip grip 16.LED technology (LED life-100000 hrs or more) 17.Warranty –2 year			
11.	Wind meter	1. Should be able to measure wind speed and direction with high accuracy. 2. Durable construction- Should be designed to withstand harsh outdoor conditions, including high temperatures humidity and exposure to dust and debris. 3. Portable and light weight 4. Simple and intuitive interface that allows for easy			

DCIF, CISF

DIG South Zone

DyCFO, DFS

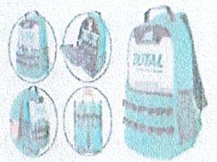
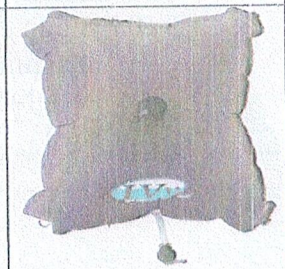
Meenakshi

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		1. operation even in low light conditions. 2. waterproof and dust proof (IP-67 rating) 3. Should have a backlit display 4. Should have the ability to store wind speed data for later analysis. 5. Long Battery life: at least10 days 6. With lanyard Warranty-at least 2 years			
12.	Pathal (modified sickle)	1.Blade material- high quality carbon steel/ stainless steel. 2.Blade length –18-20 inches 3.Blade shape- curved with a sharp serrated edge 4.Handle material- durable and light weight eg. wood, plastic or rubber for easy handling and manoeuvrability. 5.Handle length- Long enough to provide a comfortable grip and control while cutting, but not too long 6.Safety features- should have a guard or safety ring to protect the hand from the blade and a locking mechanism to keep the blade securely in place while in use. Weight- not more than 1.5 kg Durability- able to withstand heavy use and exposure to harsh conditions such as extreme temperature and rough terrain. 7.A protective sheath for safe storage and transportation. 8. Warranty- 1 year			

DCF, CIS

DIG (North Zone)

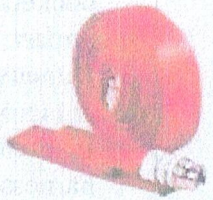
Dy CFO, DFS

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
13.	Tool kit bag	1. It should be made of tear resistance ballistic material. 2. It should consist of 48 total pockets including 2 hardshell pockets to protect electronics and equipment from impact. 3. Dimension should be minimum:- D- 24 cm, W- 45 cm & H - 51 cm with ±5% 4. It should have padded and breathable load-bearing harness that evenly distributes the weight for more comfort and jobsite performance 5. It should have adjustable chest strap and attachment strap for rolling bags 6. It should have Rugged metal zippers to provide increased durability It should have a hard moulded base that allows backpack to stand up and protects from ingress of dirt and water			
14.	Portable water tank(Collapsible)	1.Capacity- at least 500 litre. 2.Material- made from polyester, coated with PVC suitable, UV resistant (min tensile strength and Tear strength) 3.Durability- reinforced PVC giving maximum stability and able to withstand repeated use and rough handling. 3.Light weight (empty weight not more than 10 kg) and easy to carry with built- in- handles or straps. Folded size shall not exceed by 70X45X45 cm. 4.Easy to fill and empty. 5.Easy to clean. 6.Weather resistant- should be able to withstand extreme temperature and weather conditions such as heat, cold and rain. 7.Safety feather - should have a secure lid and a pressure relief valve to protect leaks and spills. 8.Warranty- 1 year			

DCIF, CISF

DIG (Western Zone)

DyCFO, DFS

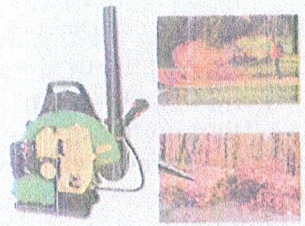
S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
15.	Fire hose 30 m	1.Should be light weight and easy to handle. 2.Should be made of a durable material that can withstand exposure to heat, abrasions and punctures. 3.Should have a high burst pressure and a high flow rate. 4.Should have a low friction loss, which will reduce the amount of water pressure lost as the water flows through the hose. 5.Should be resistant to kinking and collapsing so the water flow is not interrupted. 6.Made of a material that does not leave a toxic residue. 7.Easy to roll and pack 8.Warranty- at least 1 year 9. Length: 30 m 10. 63 mm diameter (IS 906 for coupling made of gun metal-male and female couplings 63 mm dimeter)	IS 14933 Type A, B Canvas is to be used for wild fire situation. (Type A is suitable. Made of canvas)		

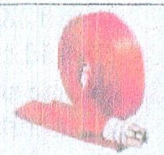
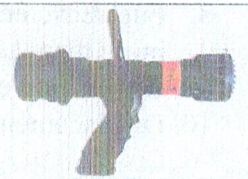
DCIF, CISF

DIG (North) Zone

Dy CFO, DFS

Advanced /Specialised Tools

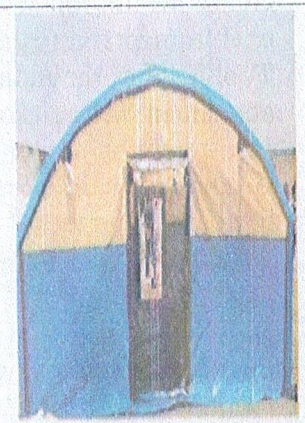
S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
16.	Leaf blower	1. High air flow and volume - not less than 350 CFM (cubic feet per minute) 2. Light weight and portable, (not more than 12Kg) 3. Should be built to withstand heavy use and be able to withstand exposure to dust, dirt and other debris. 4. Battery operated/ Petrol operated (Preference for battery operated) 5. Long battery life (18- 22 V Li-ion Battery) 6. Run time- at least 1 hr of continuous use on single charge 7. Fuel tank – at least 2 Ltr. 8. Fuel Efficiency (at high power) – not more than 2.5 L/h 9. Engine power- 3-5HP 10. Displacement -55-65 CC			
17.	Drip torch	A double-threaded cover design makes for compact transportation and quick assembly for use. Can be carried on the backpack belt. Safety Tank approved for fuel transportation. Burner with 360° return to prevent internal deflagration. Flow regulator valve. Weight Max 500 Grams Fuel Blend for use 2/3 Diesel +1/3 Petrol The burner with 360° return and flow regulator valve makes the drip torch a safe and efficient tool. Its includes- 1 Fuel tank.			

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		2 Detachable handles. 3 Wick. 4 Anti-return system.			
18.	Fire fighting Hose	1.Length – 30-50 Mtr 2.Material – PVC or rubber 3.Dia -63mm and 38 mm 4.Working pressure – at least 150 PSI 5.Burst pressure – at least 450 PSI 6.Couplings – Brass or Aluminum 7.Nozzle – Adjustable with multiple spray pattern 8.Kink and abrasion resistant 9.UV and Ozone resistant 10.Light weight 11.Color – Orange or yellow 12.Warranty- at least 1 year	Specification from the Fire service IS same		
19.	Branch pipe variable flow (Lightweight)	1.Material- Lightweight and durable materials such as aluminium or high-density polyethylene (HDPE) 2.Flow rate- 200 -800 Ltr /Min (adjustable) 3.Nozzle - should come with a nozzle that can be adjusted to produce different spray patterns such as straight stream, fog or cone pattern 4.Coupling Dia 63mm (Instantaneous Max. 5.Resistant to corrosion and wear 6.Withstand high temperature and rough terrain 7.A low friction loss design to minimize restriction and maximize water flow 8.Built-in pressure relief valve and water shut-off valve 9.Warranty- at least 1 year	IS		

DCFF, CLLS

DIG (Northern Zone)

DyCFO, D FS

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
20.	Pulaski Tools	1.Material- High carbon steel blade 2.Blade length- 9-12 inches 3.Blade width- 2-3 inches 4.Handle- ergonomic design with a rubber grip for comfortable and secure handling 5.Handle material- fiberglass or wood 6.Weight- not more than 2.5 kg 7.Sheath- heavy duty nylon or leather sheath for safe storage and transport 8.Rust and corrosion resistant 9.Total length- 30 to 36 inches 10.A single bit axe blade on one side and a mattock blade for digging on the other. 11.Axe head should be hydraulically seated onto the handle and secured with a serrated metal edge. 12. Eye section should be dried to below 10% moisture to prevent shrinkage or loosening. 13.Warranty- 1 year			
21.	INFLATABLE RECTANGULAR TENT- 7.5 Mtrs X 5.5 Mtrs	1.Windows -6 no's with Mosquito net windows Doors 2. 2 nos. Entrance/Exit Anchoring 3.8 nos. (Steel pegs of 0.5mtrs length with rope of 10 meter length each for Anchoring) 4. Accessories Tie rope, steel pegs for anchoring, Repair kit (Including swatches, adhesive), AC blower with Lithium-Ion battery, Solar system includes Solar Panel, Solar Operated lights, Fans and Exhaust fans, Invertor, Hammer along with Carry bag for Tent & accessories			

Dett, CISF

DIG (Zone)

Dy CFO, DFS

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S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		5. Blowers and Batteries -2 No AC blower-7.0Kg, Solar System-52 Kgs 8. Weight of Tent- Weight of Tent 125 +/- 7 Kgs, Other Offerings 55 +/-5 Kgs & Accessories 55 kgs approx. 9. User manual -Manual with complete operations, Do's & Don'ts 10.Valve for inflation-Two Valve Digital manometer 11.Solar Powered digital manometer 12.It operates directly from sunlight. To turn it on just place it in a well-lit environment. 13. Safety Valve-One Pressure relieve valve for over pressure safety			
22..	Chain saw(Battery operated)	Battery Capacity Min 40 V Guide Bar Length Min 16" (400 mm) Chain Saw Speed Min 0-5000 fpm Weight Max 6 Kgs Low noise level at only 104 dB(A) with zero emissions for operator comfort and reduced environmental impact Tool less bar mounting and chain tension adjustment for quick and easy set up and adjustment on the jobsite Automatic chain oiler maintains optimal bar/chain lubrication during operation with no adjustments required Chain oil view window enables operator to easily check oil level Push-button on/off switch with auto power-off function for extended battery life			

DCIF, CISF

DY CFO, DFS

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		Lock-off button prevents accidental start up for maximum operator safety Variable speed trigger switch (0 - 5,020 FPM) Inertia chain brake provides maximum operator protection if kickback occurs Wet guard with IPX4 rating offers maximum protection in wet environment. Ergonomic soft rubber grip design for vibration absorption and comfortable operation			
23.	First Aid Kit	Bandages – Assorted size of adhesive bandage gauze pads and wound clause strips 6Adhesive strip(2"X3") 2 Adhesive oval bandage (2"X4") 6 Butter fly Bandage(Med) 3Kunckle Bandage 1 Flat rolled Elastic Bandage(3")W/Velcro Closer 1Traingular Bandage 1Compressed wound packing gauze 1Conforming gauze roll(3") 2 Gauze pad(4"X4", 2Pack) 2Gauze pad (3"X3",2 Pack) 2 Gauze pad(2"X2", 2Pack) 1 Trauma Pad(8"X10") 1 Adhesive Tape(1"X10 Yds) 1 Burnet Dressing (4"X4") Secure lasing 3" Conforming Gauze 2 Second Skin Dressing (1.5"X2") can also be used for blisters 1 Semi permeable dressing(4"X4.75") 1Moleskin Kit (6 - 2"X3"Pads)			

DCHF, CISF

DIG (North Zone)

DyCFO, DFS

S/No	Nomenclature of Equipment	Specification Of Items	Addl. Remarks	Photos	Comments
		2Ivy X Poison Ivy Cleanser Pads **.Antiseptics**- alcohol wipes, hydrogen peroxide and antibiotic ointment 4 Triple antibiotic ointment unit dose 2 Antiseptic Towelled 1 Tincture of benzoin (Improves adherence for butterfly bandages) 2 Hydrocortisone cream (1%) unit dose 2 Sal jet saliva vial **.Pain relief-** ibuprofen (NSAID) 200 mg tablets(2Pack) 3 Sting relief pad **.Eye Care** Eye wash solution and eye drops .1 SWAT-T Tourniquet **.PPE** 1 Pair Nitrile Gloves (Rolled) 1CPR face Shield .Tools 1 Tweezer and safety pin kit 1 EMT Trourna Shears(5.5") 1 Thermometer .Burn Gel unit dose/Aloe vera gel . 2 Diphenhydramine (Antihistamine) 25mg caplet . 1Bug X Towelette , unit dose .1Sunscrean, Unit dose . 1First aid manual (Guide to first aid and emergency care) .Water proof and durable carrying case			

DCIT, CISF

DIG (North Zone)

By CFO, DFS