OOPPERA BALETTI

Suomen kansallisooppera ja -baletti Finlands nationalopera och -balett Finnish National Opera and Ballet

OPERA EUROPA Safety on Stage

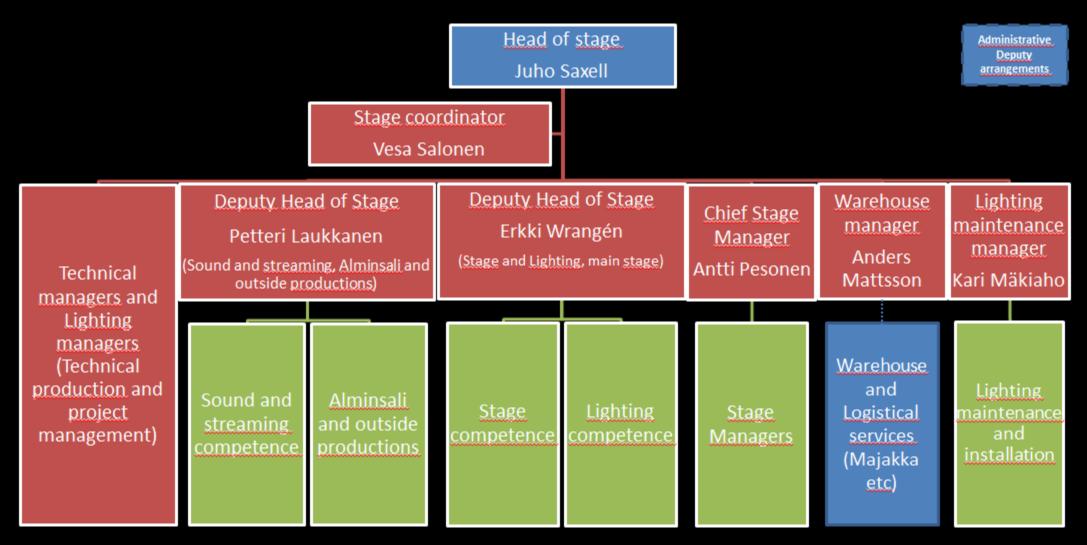
II.

Erkki Wrangén

41 years Mechanical engineer Working at FNOB 3 years Work experience - industry Key account manager Project manager Manufacturing manager



Stage tech organization





				Deputy Head of Stage (Lighting and Stage, main stage)									
Lindeman S Deputy D technical te	Harri Sinda Xeputy shnical, Woaser	Marko Santomaa Deputy technical manager	Anne Makkonen Deputy technical manager	Esa Pajunen Deputy technical manager	Marko Sunila Deputy technical manager	Pasi Eriksson Deputy technical manager	Deputy	Juha Rahikainen Chiefstage operator	Henri Kosonen Deputy lighting manager	Jyrki Bonde- Jensen Deputy lighting managet	Jukka Höysti Deputy lighting manager	Gabriel Phillips Deputy lighting manager	Juha-Matti Koskipää Chief lighting operator
		Juha Kilponen	Petteri Honkapuro	Juha Kukkonen	Ville Heinonen	Mika Erkkinen	Ali Abdul- Rahman	luha Varila Stage operator	Leo Ollikainen	Jyri Oittinen	Esa Mättölä	Jukka Suhonen	Heikki Riihijärvi Video operator
		Marco Lindroos	Mikko Alanko	Ahti Meier	Jorma Lehtinen	Teemu Kilponen	lija Juutilainen	Jussi Tuovinen Stage, operator	Paavo Paananen		Roope Kokkonen	Kalle Rannikko	Sarkkila Lighting operator
		Mikko Viman	Jonimatti Suominen Kalle	Kalle Rannikko	Jarkko Salminen	Sami Taive	Markku Salmi	Suno Vornanen Stage operator	Teemu Patrikainen (tunti)	Hannu Moilanen (työloma)		Nana Laurikkala (Sijaisuus)	Saviranta Lighting Sanna-
		Mikko Toukola	Nieminen (määräaik) Kimmo	Marko Natununer	Topi Pudas (tunti)	Kari Lode	Lauri Hippeläine n			Veera Vanninen (tunti)		Leila Bayar (tunti)	Kaisa Laakkonen Lighting
		Jyrki Könnömäki (tunti)	Turunen (tunti) Harri Loikkanen	– Jukka Suhonen		Arto Tossavaine n	Esa Pajunen (määräaik)			Milla Veirto (tunti)		lani Virmakosi (tunti)	á
		Antti Huusko (tunti)	(Tunti) Miska Siikaluoma	Jan Grönqvist (määräaik)	Valtteri Arokil (tunti)	Ken Sainio (tunti)	Lauri Telkki (tunti)					Matti Kemppi 50%	
			(Tunti)										

Erkki Wrangén



SAFETY ON STAGE

WORKING ON STAGE NOW

- HELMETS
- PROTECTIVE GLASSES
- PROTECTIVE SHOES
- SAFETY RISK ANALYSIS ON STAGE

TRAVELING ON STAGE

- ONLY REQUIRED PERSONNEL IS AUTHORIZED ON STAGE



How we did it?



Helmets why?

- 1. Head shoud be protected during work on forklift basket up high. OK.
- 2. What about crew under the basket?
- 3. If crew under the basket is protected what about other people on stage?
- 4. What other people? Well, there is....next slide.

1. Reported 21 pcs of near by or accidents on head area in one year



Only required personnel is authorized on stage

SET UP

- safety gear on
- personnel who work on this face

REHEARSAL

- personnel who work on this face

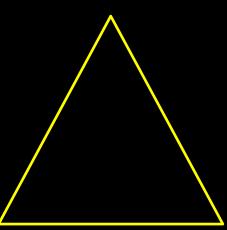
PERFORMANCE

- personnel who work on this face



Culture change - holy triangle

Organization Back support



Information flow Ensure it Responsibilities Understanding



THANK YOU

