## Electrical Budget Worksheet (Na Na - Saga 43) 1 Calculate your DC Loads:

1.1 . 1.4					
Lighting		Amps	Hours	AH/Day	
	Running Lights	0.6	9	5.4	
	Masthead Tricolor Light			0.0	
	Anchor Light			0.0	
	Strobe Light	1.0	5	5.0	
	Spreader Lights		ŭ	0.0	
	Cabin Light (small)	1.0	1	1.0	
	Cabing Light (big incandescent)	2.0	2	4.0	
		2.0	2		
	Cabing Light (flourescent)		_	0.0	
	Instrument Lights	0.3	9	2.7	
	Handheld Spot Light			0.0	
	Other		-	0.0	
		Lighting AH	L	18.1	
Galley		Amps	Hours	AH/Day	
	Refrigeration			0.0	
	Prop Solenoid			0.0	
	Other		_	0.0	
		Galley AH		0.0	
Electronic	s	Amps	Hours	AH/Day	
	Autopilot	4.0	24	96.0	
	VHF (receive)	0.5	24	12.0	
	VHF (transmit)	5.0	0.5	2.5	
	SSB (receive)	1.5	2	3.0	
	SSB (transmit)	28.0	0.5	14.0	
	SSB Digital controller	0.2	2	0.4	
	GPS	0.2	2		
		0.0	0.4	0.0	
	Instruments	2.0	24	48.0	
	Weather fax receiver			0.0	
	Radar (standby)			0.0	
	Radar (transmit)			0.0	
	AIS			0.0	
	Energy Monitors			0.0	
	Stereo			0.0	
	Computer (screen off)			0.0	
	Computer (screen on)			0.0	
	Computer (serial adapter)			0.0	
	Other			0.0	
		Electronics AH		175.9	
	_		<u>L</u>		
Plumbing		Amps	Hours	AH/Day	
	Fresh Water Pump			0.0	Calculate using average water consumption.
	Bilge Pump(s)			0.0	This should be zero unless the boat leaks.
	Other			0.0	This should be 2010 unless the boat loaner
	Outer	Plumbing AH		0.0	
		r idinibility / ti i	L	0.0	
Inverter					
IIIVEITEI		\M/atte	Hre/day	AH/Day	All values assume inverter efficiency - 85%
	Microwayo	Watts	Hrs/day	AH/Day	All values assume inverter efficiency = 85%.
	Microwave	Watts	Hrs/day	0.0	All values assume inverter efficiency = 85%. Power factor may mess up this estimate.
	Chargers (nicad)	Watts	Hrs/day	0.0 0.0	•
			Hrs/day	0.0 0.0 0.0	•
	Chargers (nicad)	Watts Inverter AH	Hrs/day	0.0 0.0	•
	Chargers (nicad) Other	Inverter AH	Hrs/day	0.0 0.0 0.0 <b>0.0</b>	•
	Chargers (nicad)	Inverter AH	Hrs/day	0.0 0.0 0.0	•
	Chargers (nicad) Other  Gross Energy Consumption AH/	Inverter AH	Hrs/day	0.0 0.0 0.0 <b>0.0</b>	•
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources	Inverter AH Day		0.0 0.0 0.0 0.0 <b>0.0</b>	•
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device	Inverter AH	Hrs/day	0.0 0.0 0.0 0.0 194.0	Power factor may mess up this estimate.
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources	Inverter AH Day		0.0 0.0 0.0 0.0 <b>0.0</b>	Power factor may mess up this estimate.  Assumes one large panel.
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device	Inverter AH Day		0.0 0.0 0.0 0.0 194.0	Power factor may mess up this estimate.
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0	Power factor may mess up this estimate.  Assumes one large panel.
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
Alternative	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg.	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg.	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
Net Energy	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
Net Energy	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day Consumption, AH/Day	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
Net Energy Desired Ho	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day Consumption, AH/Day	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0	Power factor may mess up this estimate.  Assumes one large panel.
Net Energy Desired Ho Range of E	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day y Consumption, AH/Day ours Between Charging Battery Use	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0 0.0 194.0	Power factor may mess up this estimate.  Assumes one large panel. Assumes AIR Marine wind turbine in good location.
Net Energy Desired Ho Range of E	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day of Consumption, AH/Day	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0 194.0	Power factor may mess up this estimate.  Assumes one large panel. Assumes AIR Marine wind turbine in good location.
Net Energy Desired Ho Range of E Recommen	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day y Consumption, AH/Day purs Between Charging Battery Use Inded Battery Capacity	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0 194.0 24 431	Assumes one large panel. Assumes AIR Marine wind turbine in good location.  For example, from 50-85% state of charge.
Net Energy Desired Ho Range of E Recommen	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day y Consumption, AH/Day ours Between Charging Battery Use	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0 0.0 194.0	Power factor may mess up this estimate.  Assumes one large panel. Assumes AIR Marine wind turbine in good location.
Net Energy Desired Ho Range of E Recommen	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day v Consumption, AH/Day burs Between Charging Battery Use Inded Battery Capacity Output, Amps	Inverter AH Day		0.0 0.0 0.0 0.0 194.0  AH/day 0.0 0.0 0.0 194.0  24  0.45  431	Assumes one large panel. Assumes AIR Marine wind turbine in good location.  For example, from 50-85% state of charge.  Target would be 25% flooded, 40% gel, of capacity.
Net Energy Desired Ho Range of E Recommen	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day y Consumption, AH/Day purs Between Charging Battery Use Inded Battery Capacity	Inverter AH Day		0.0 0.0 0.0 0.0 194.0 AH/day 0.0 0.0 0.0 194.0 24 431	Assumes one large panel. Assumes AIR Marine wind turbine in good location.  For example, from 50-85% state of charge.
Net Energy Desired Ho Range of E Recomment Alternator ( Charge Eff	Chargers (nicad) Other  Gross Energy Consumption AH/I Energy Sources Device Solar, avg Wind, avg Water, avg. Contribution of AES AH/Day v Consumption, AH/Day burs Between Charging Battery Use Inded Battery Capacity Output, Amps	Inverter AH Day		0.0 0.0 0.0 0.0 194.0  AH/day 0.0 0.0 0.0 194.0  24  0.45  431	Assumes one large panel. Assumes AIR Marine wind turbine in good location.  For example, from 50-85% state of charge.  Target would be 25% flooded, 40% gel, of capacity.