

# Dawntreader to Shangrila

[The song of rocket propulsion techniques]

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commissioned by North Cambridge Family Opera  
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Allegro  $\text{♩} = 144$  *Unison*

1-4 4 5 *p*

Safe in my ship on the mag-lev launch sled ac - ce - le - rate to Mach 8 up the

*Unison* 8 *f* *p*

moun - tain side Fa - cing east near e - qua - tor u - sing pla - net' - ry ro - ta - tion to gain

*Unison* 11 *f*

more ac - cel - e - ra - tion What a ride! At the peak of stra - to - vol - ca -

*Unison* 14 *mp*

no Chim - bo - ra - zo (As far from Earth's cent - re as you can go)

*Unison* 17 *f*

At twen - ty thou - sand feet where air is thin With a might - y roar my

*Sop* 20 *ff*  
*Alto* *ff*  
*Unison* *ff*  
*Baritone* *ff*

Ex - plodes in - to che - mi - cal life Liqu - id  
rock - et ship's en - gine  
Ex - plodes in - to che - mi - cal life Liqu - id

*Sop*

*Sop*

*Sop*

Sop

*Rallentando*.....

32

pla-net Earth The first time I've bro - ken - free from Ga - ia's gra - vi - ta - tion - al

Alto

pla-net Earth The first time I've bro - ken - free from Ga - ia's gra - vi - ta - tion - al

Baritone

pla-net Earth The first time I've bro - ken - free from Ga - ia's gra - vi - ta - tion - al

Sop

*p Allegretto dolce*

36

grasp since the day of my birth...

Alto

grasp since the day of my birth...

Baritone

grasp since the day of my birth...

Sop

*p*

40

Now all is peace, the en - gines calm As we drift at me - te - o - ric

Alto

Now all is peace, the en - gines calm As we drift at me - te - o - ric

Baritone

Now all is peace, the en - gines calm As we drift at me - te - o - ric

Sop

44

speed through vel - vet void I ob - serve my sun - sail slow - ly

Alto

speed through vel - vet void, through vel - vet void I ob - serve my sun - sail slow - ly

Baritone

speed through vel - vet void, through vel - vet void I ob - serve my sun - sail

Sop

48

un - fold and I tweak my course to - wards my as - ter - oid

Alto

un - fold and I tweak my course to - wards my as - ter - oid

Baritone

un - fold and I tweak my course to - wards my as - ter - oid

Sop

52

We know that light has mo - men - tum, though pho - tons no mass So my

Alto

We know that light has mo - men - tum, though pho - tons no mass So my

Baritone

We know that light has mo - men - tum, though pho - tons no mass So my

Sop

55

mile-square sail will drive me a long Ra - di - a - tion

mile-square sail will drive me a long Ra - di - a - tion

Baritone

mile-square sail will drive me a long will drive me a long Ra - di - a - tion

Sop

59

press-ure is all I need As I sing my space - yacht sail - or's

press-ure is all I need I need As I sing my space - yacht sail - or's

Baritone

press - ure is all I need I need As I sing my space - yacht sail - or's

Sop

63

song... So - lar pa - nels un - furl from their or - i - ga - mi nest

song... So - lar pa - nels un - furl from their or - i - ga - mi nest

Baritone

song... So - lar pa - nels un - furl from their or - i - ga - mi nest

*Sop*

67

Pow - er - ing the i - on drive to cre - ate, by strip - ping e - lec - trons from

*Alto*

Pow - er - ing the i - on drive to cre - ate, by strip - ping e - lec - trons from

*Baritone*

Pow - er - ing the i - on drive to cre - ate, by strip - ping e - lec - trons from

*Sop*

70

xe - non a toms a po - si - tive i - on cloud which ac - ce - le - rates

*Alto*

xe - non a toms a po - si - tive i - on cloud which ac - ce - le - rates

*Baritone*

xe - non a toms a po - si - tive i - on cloud which ac - ce - le - rates

*Sop*

73

*mf*

El - ec - tro - sta - ti - c'ly u - sing Cou - lomb force to - ward

*Alto*

*mf*

El - ec - tro - sta - ti - c'ly u - sing Cou - lomb force to - ward

*Baritone*

*mf*

El - ec - tro - sta - ti - c'ly u - sing Cou - lomb force to - ward

*Sop* *f* 75  
 po-si-tive then ne-ga-tive grids, e-mer-ges un seen (Aft-er neu-tra-li-sa-tion by a

*Alto* *f*  
 po-si-tive then ne-ga-tive grids, e-mer-ges un seen (Aft-er neu-tra-li-sa-tion by a

*Baritone* *f*  
 po-si-tive then ne-ga-tive grids, e-mer-ges un seen (Aft-er neu-tra-li-sa-tion by a

*Sop* 78  
 ca - thode gun) As a high-speed, low - mass i - on beam High - speed, low - mass

*Alto*  
 ca - thode gun) As a high-speed, low - mass i - on beam High - speed, low - mass

*Baritone*  
 ca - thode gun) As a high-speed, low - mass i - on beam High - speed, low - mass

*Sop* *p* 82 *crescendo ed accelerando poco a poco...*  
 i - on beam i - on beam My ve-lo-ci-ty in-crea-ses

*Alto* *p*  
 i - on beam i - on beam My ve-lo-ci-ty in-crea-ses

*Baritone* *p*  
 i - on beam i - on beam My ve-lo-ci-ty in-crea-ses

Sop 86

Alto

Baritone

stea - dy but slow on my jour - ney to the pla - nets to ex - ploit gra - vi ta - tion with the

Sop *mp*

Alto *mp*

Baritone *mp*

sling - shot ef - fect Which as I swing by will vast - ly en - hance Dawn - tread - er's

Sop *mf* 92

Alto *mf*

Baritone *mf*

ac - cel - er - a - tion Gra - vi - ty as - sist will use three in - er pla - nets



Sop

95

Ve - nus first and then Earth and then Mars At ev' - ry vi - sit - I'll gain

Sop

98

much more speed as each mas - sive bo - dy Dawn - tread - er veers past

Sop

101 *f*

Suc - cumb - ing to the pla - net's pull we will quick - en But when we es - cape it may seem

Sop

104

we have slowed But o - ver - all we have gained from this

we have slowed But o - ver - all we have gained from this

we have slowed But o - ver - all we have gained from this

Sop

106

gra - vi - ty ass - ist ma - noe - vre Or - bi - tal en - er - gy from the pla - net so that

gra - vi - ty ass - ist ma - noe - vre Or - bi - tal en - er - gy from the pla - net so that

gra - vi - ty ass - ist ma - noe - vre Or - bi - tal en - er - gy from the pla - net so that

Sop

108

much, much fas - ter we can go Then the as - ter - oid belt I'll o - ver - shoot Be - fore

much, much fas - ter we can go Then the as - ter - oid belt I'll o - ver - shoot Be - fore

much, much fas - ter we can go Then the as - ter - oid belt I'll o - ver - shoot Be - fore

*Rallentando poco a poco...*

Sop

111 *ff*

u - sing gi - ant Ju - pi - ter to slow me down And then back to the

Alto

u - sing gi - ant Ju - pi - ter to slow me down And then back to the

Baritone

u - sing gi - ant Ju - pi - ter to slow me down And then back to the

Sop

114

belt a - gain To touch down at last on Shan - gri - la And build my

Alto

belt a - gain To touch down at last on Shan - gri - la And build my

Baritone

belt a - gain To touch down at last on Shan - gri - la And build my

Sop

*accelerando.....*

118 *p*

home on as - ter - oid ground... on as - ter - oid

Alto

*p*

home on as - ter - oid ground... on as - ter - oid

Baritone

*p*

home on as - ter - oid on as - ter - oid ground... on as - ter - oid

*Tempo primo*

Sop 122 *mp*

ground... I won the lot-ter-y, ten zil-li-on bucks I knew in-stan-ta-neous-ly what

Alto *mp*

ground... I won the lot-ter-y, ten zil-li-on bucks I knew in-stan-ta-neous-ly what

Baritone *mp*

ground... I won the lot-ter-y, ten zil-li-on bucks I knew in-stan-ta-neous-ly what

Sop 126 *mf*

I would do I don't like peo-ple but I do like space So I'm li-ving on an

Alto *mf*

I would do I don't like peo-ple but I do like space So I'm li-ving on an

Baritone *mf*

I would do I don't like peo-ple but I do like space So I'm li-ving on an

Sop *ff* 130

a-ster-oid! Well, would-n't you? Well, would-n't you?

Alto *ff*

a-ster-oid! Well, would-n't you? Well, would-n't you?

Baritone *ff*

a-ster-oid! Well, would-n't you? Well, would-n't you?

*Sop* *f* *mf*

134

It feels so good! Well, would - n't you? If you could

*Alto* *f* *mf*

It feels so good! Well, would - n't you? If you could

*Baritone* *f* *mf*

It feels so good! Well, would - n't you? If you could

*Sop* *mp*

138

I bet you would Yes, you would!

*Alto* *mp*

I bet you would Yes, you would!

*Baritone* *mp*

I bet you would Yes, you would!